

Nation's Business

A LOOK AHEAD

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CHART PLOTTED IN TERMS OF 1955 DOLLARS

GET READY FOR A BOOST IN SALES *page 32*

Three articles explain how increasing income will change **selling methods, buying habits, retail stores**



Nearly midnight in Indianapolis...



It's the start of another workday for people on the third shift at this Western Electric plant . . . part of a round-the-clock effort which means more and more Bell telephones are moving out to serve you.

Just a year ago bright new telephones in color went into heavy volume production here. And today hundreds of thousands of Bell telephone users are enjoying the added satisfaction that color can give to telephone service. They're also enjoying the other new telephone conveniences that are assembled here . . . telephones with illuminated dials, push-button telephones, volume con-

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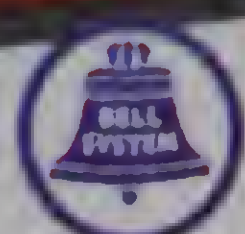
This is the major part of our job as the manufacturing and supply unit of the Bell System . . . providing your Bell telephone company the equipment it needs to make possible good, dependable telephone service.



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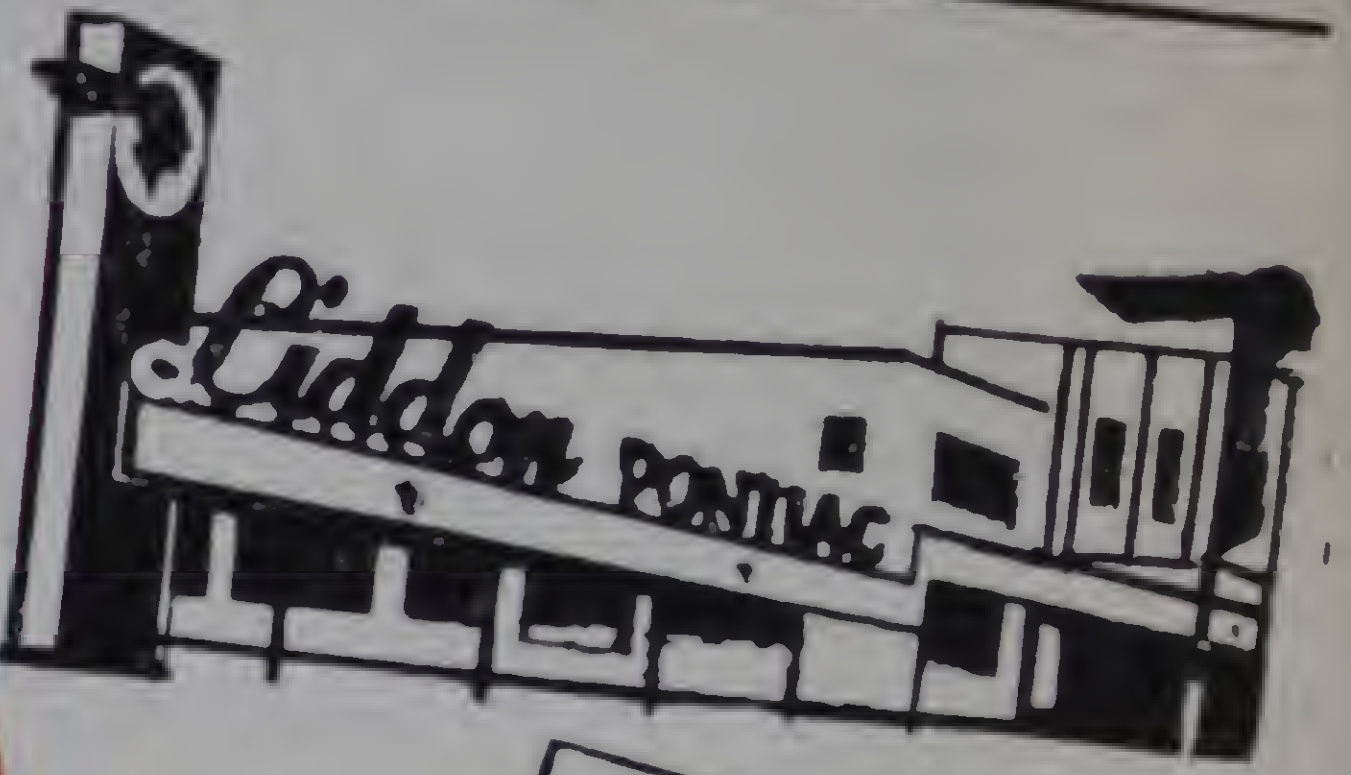
Alva Restaurant

When I set up in business and a carpenter by trade. I contracting business, what

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April 30, 1955

George S. May Company
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Gentlemen:

The engineering work that your company did for our store has had an almost unbelievable and miraculous effect upon our organization, sales and profits. Since we first called you in exactly two years ago this month, we have called you back 9 times and have paid you over \$31,000 in fees. I honestly believe that we have gotten back \$5 for every \$1 we spent with you.

When I took over this store from my Father in 1949, I increased our sales that year from \$85,000 to \$185,000. By 1952, our volume was up to \$465,000 but we weren't making any money. Besides I was working and worrying myself into a nervous frazzle. In April, 1953 I had your engineers come in to give me some kind of an organization that made sense and some good working controls. They did their work well. The George S. May system of Functional Organization is working like a charm. My department heads know what they are supposed to do and they take complete responsibility for doing it. We are regularly hitting within 1% of our forecasts on sales and profits on the Profit and Expense Control which you established. Sales in 1954 jumped to \$815,000, on which we showed a net profit of \$23,709. Based on our sales and net profit for the first 4 months of this year, we will do \$975,000 and show a net of \$40,000.

And we're still growing, fast. Construction is now under way to double our floor selling space to 18,500 square feet. I have just invested \$25,000 to create a big parking lot back of the store. Our employees have increased from 17 to 23 and will soon be stepped up to 30.

And what do I do while all this is going on? I sit quietly in my little office on the second floor and look out over the store through a one-way mirror. Operating the business as I do with the methods and controls that your company established, I could go away for 6 months, confident that the business would go right on increasing and making money. I firmly believe that in his system of Functional Organization, Mr. George S. May has created one of the most valuable working tools that American industry has ever seen. I will be happy to confirm at any time on the telephone the opinions and experience expressed in this letter.

Very sincerely yours,
GILBERT BROS.

Harry V. T. Gilbert, Owner

HVTG:ib

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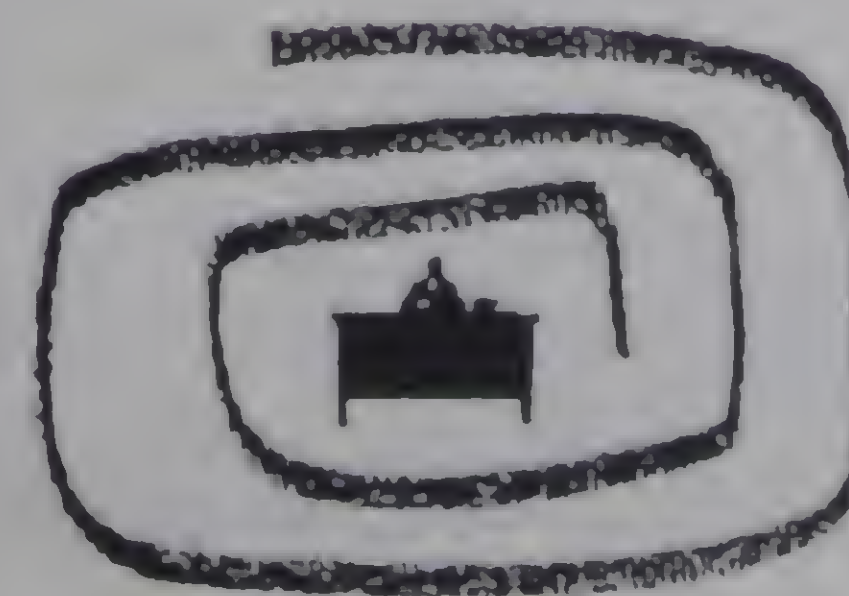
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How the busy businessman can buy insurance like a 'specialist'

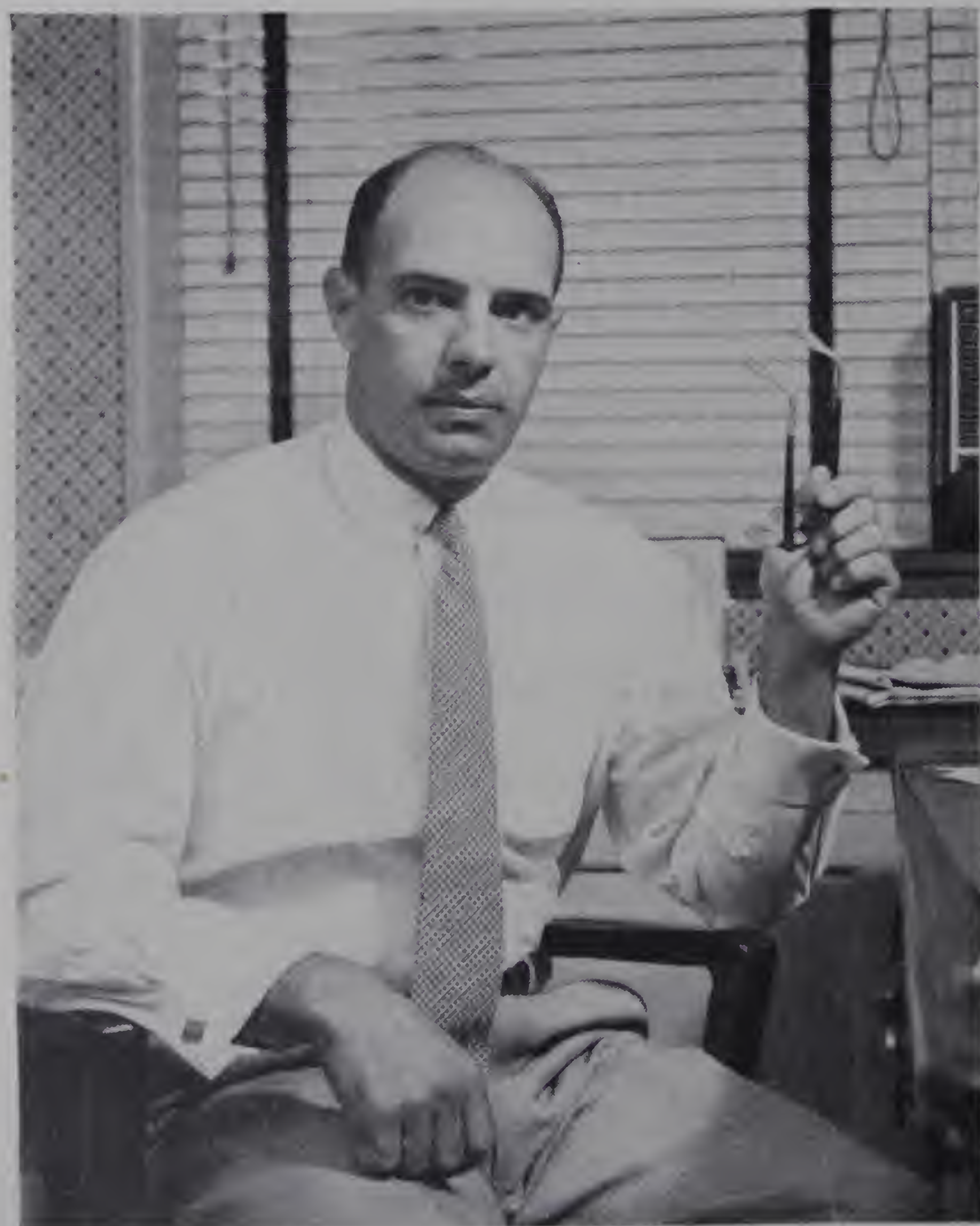


How to keep fully insured and not pay too much for this protection is the concern of many companies. Large organizations frequently have an insurance buyer on the staff, the 'specialist' who spends his time keeping his company's insurance program up-to-the-minute.



In smaller companies the treasurer, purchasing agent or even the boss himself may have to double on insurance-buying. This busy company, even lacking an insurance manager, can get 'specialist' advantages similar to those of the big fellow, resulting in astute insurance-buying.

Under North America's RISK-COST CONTROL program the agent and these experts bring an insurance 'specialist' into the picture



THE AGENT The agent, or broker, is an independent businessman. He knows from experience that the best way to make a living, and build a reputation, is to get his policyholder the 'best buy'—exactly the coverage that's needed at lowest cost. The big-company buyer also asks the agent for this kind of help in rounding out his program.



THE MEN WHO HELP: From North America headquarters a Fieldman, an Underwriter and a TR (Technical Representative) talk over an insured's risk picture. The Fieldman may help the agent survey a risk, obtain exact specifications or draw up an insurance program. Other experts help on underwriting, claims, loss prevention.

PEOPLE & PLACES

Scenes from the North America album showing how policyholders get world-wide insurance service with nearby control, complete confidence and low cost.



FACILITIES ABROAD This is Hong Kong, where North America maintains an office, one of 24 service offices abroad. North America is licensed to do business in 36 countries outside the U.S. This is important to the policyholder, who deals with only one insurance company on all properties, shipments, claims, adjustments, details, etc.



WHO'S LIABLE HERE? The nature of his operations often exposes a manufacturer to accidents and claims beyond the scope of ordinary liability coverage. North America's Blanket Liability Policy is tailored to the insured's specialized needs and covers every essential liability exposure to loss, ordinary or extraordinary.

PRODUCTS AWAY FROM HOME A manufacturer in Chicago ships goods on consignment and gets broad protection under North America's Manufacturer's Output Policy. It covers not only raw products going to plant, but finished products (like tires in the picture below) leaving plant—while in transit, in warehouses—and all property away from home.



PROTECTED CARGO Many marine losses are caused by poor packing and incorrect marking for shipment. When an exporter in Louisville decided to move a whole plant to the Far East, North America had the experience and the shipping knowledge to give the company valuable advice on how to prepare goods for shipment so the cargo would arrive intact and safe.

AN OUNCE OF PREVENTION Losses from fire, accidents and other hazards keep premiums up. North America maintains trained corps of specialists who show how to prevent accidents and losses before they happen. This puts the personnel and facilities of a large insurance organization practically on the policyholder's staff.



Talk over the advantages of buying insurance like a specialist with an agent of the North America Companies or your broker.

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Big factor in \$350,000 sales jump



A \$240 Kodak Verifax Copier—operated by the office boy at Jack Dreyfus Company, N.Y.C.—keeps 15 overseas sales agents up to date on constantly changing prices and additions to the firm's automotive parts line.

Getting photo-exact information out *immediately* was impossible before, according to Mr. Dreyfus. Ability to do so now has contributed greatly to this small exporter's spectacular \$350,000 increase in sales this year.



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Cuts dictation, retyping, proofreading. No need to dictate a letter which quotes from one that has been received. Mr. Dreyfus simply sends a Verifax copy. Letters asking questions are handled by jotting answers in the margin and mailing Verifax copies as replies. No end to the uses for this sensational machine which *anyone* in the office can operate. For example, prices are added to suppliers' packing lists. Then Verifax copies are made and sent out as invoices to customers. Savings in retyping alone paid for the Verifax Copier in 3 weeks.

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► IF YOU WONDER which way economy's headed--look up.

That's consensus of businessmen, bankers, government officials from all parts of U. S.

Here's why they're optimistic:

1. Business borrowing for expansion is up, with over-all construction figure pushing \$30,000,000,000 for '55.

That compares with total outlay of \$26,900,000,000 year ago and \$28,300,000,000 in peak '53.

2. More people are employed than ever (65,500,000). Number of jobless (1,050,000) is half that of year ago.

3. Auto makers' plans call for production in '56 to pass this year's peak 8,000,000 units.

4. Housing starts, slowed seasonally and by tighter credit, will spurt ahead in six months.

Builders, bankers believe Federal Reserve will reduce reserve requirements, lower rediscount rate next spring.

(Note: Current rate of 1,300,000 units is second only to '50 for home building.)

Other factors:

Money in circulation approximates \$28,000,000,000. That's highest since \$28,100,000,000 of '53.

Average work week totals 41 hours, up from 39.7 year ago. Increase pushes weekly earnings to \$77.11, all-time high.

And that adds \$12,500,000,000 to labor income from year ago.

Credit repayment more than keeps pace with new credit extended.

In two-month period, repayments jumped from \$2,570,000,000 to \$2,678,000,000.

Meanwhile, new credit dipped from \$3,443,000,000 to \$3,131,000,000.

Consumer, wholesale commodity prices are on even keel. Some boosts in raw materials prices (copper, steel scrap) are offset by declines in farm and processed food prices.

► NEW HOME MARKET has built-in props.

One of strongest: Increasing demolition rate.

Example:

Greater St. Louis in next five years will tear down 27,000 old houses.

That equals total number of homes built there in '51, '52 and '53.

One real estate economist says:

"We're short at least 3,000,000 homes for adequate housing in metropolitan areas alone."

Other props:

Continuing migration from farm to city, city to suburb, state to state.

A weakness: Marriage rate's down.

In '55, it's lowest, except for '43, in 17 years.

That means drop in new household formation.

But continued family undoubling, upgrading of housing with higher incomes, can take up slack.

► MORE THAN HALF of U. S. families live in their own homes.

That's up from less than third at turn of century.

Federal Reserve Board survey shows:

1. In seven years, nearly 7,000,000 families have become home-owners.

2. More families plan to buy homes in '56 than had such plans in previous three surveys.

(Total number of home-owners this year: About 24,000,000.)

Note: FRB, Commerce Department will follow up home-ownership plans, see how many homes are actually bought next year.

► IS U. S. MORTGAGE debt too high?

A few economists raise warning flag, point out figure of \$84,000,000,000 (current debt) is almost third of disposable income (\$270,000,000,000).

But remember:

Debt isn't met all at once out of current income.

It's paid through annual charges of about \$8,100,000,000.

That's three per cent of disposable income--lesser debt percentagewise than during housing boom of 20's.

► GREATER PRODUCTION brings bigger bargains.

Example:

In 1913, average U. S. worker needed 502 weeks of gross earnings to buy a home.

Weeks needed today: 275.

That's despite tripling in price of new home.

What figures mean: Increased efficiency of steel, lumber, cement, elec-

trical industry, as well as of builders.

►HOW TIGHT is tight money?

Here's one straw in wind:

Some savings and loan associations in New York State are selling their mortgage portfolios to banks.

Why?

They need cash to meet future mortgage commitments already made. New money, from added savings, is in short supply.

That's one reason you've seen interest rates on savings accounts rising steadily.

It's part of effort to generate new capital for next year's demand.

►POPULATION GROWS faster than productivity.

That means added room for business expansion.

Commerce Department study shows:

Gross national product moves close to \$400,000,000,000 annual rate in final quarter of '55.

That's up sharply from \$360,500,000,000 rate year ago.

Meanwhile, population's up 3.5 per cent in year.

Adjusted for price boosts, inventory changes, nation's output trails population growth by 0.2 per cent.

In \$400,000,000,000 economy that amounts to nearly \$1,000,000,000 gap in single year.

►SMALL BUSINESS ADMINISTRATION now helps finance community development programs.

SBA, once limited to small business firm loans, is branching out this way:

With local bank participation, agency will approve \$75,000 loan to South Carolina town.

Purpose: To promote development, expansion of business concerns in the community.

Other development groups are expected to file applications this month.

Says one Washington, D.C., observer:

"Given time and money, SBA'll soon be RFC."

►BIGGEST LABOR NEWS next year will be in steel.

Here's what steelworkers will look for (and remember, what happens in steel filters through whole economy):

A minimum hiring rate of \$1.75 an hour plus 12-cent package.

Package (whatever its size) will be split half and half between some form of GAW and added pension benefits.

Note: In past 15 years employment in steelmaking is up 14 per cent.

Wages, salaries are up 211 per cent.

►YOUR TAX BILL varies with where you live.

Over-all, 34 per cent of personal income goes for taxes--federal, state and local.

U. S. average: 26.5 per cent federal; 7.9 per cent state, local.

►FOREIGN INVESTMENT gets added boost from Export-Import Bank.

This year, American investors are expected to earn a record \$2,500,000,000 from foreign enterprises.

Now, bank will guarantee some loans (depending on foreign conditions) up to 90 per cent.

Former limits ranged between 66 and 75 per cent.

First participant: First National City Bank of New York.

Bank will lend \$1,800,000 to rubber interests to build plant in Philippines in '56.

►YOU DON'T HAVE to be rich to set up bank trust fund.

Big western bank looked into its trust accounts, found this:

Only 2½ per cent have incomes of more than \$25,000 a year.

Note: Variable annuity is latest device to draw trust business.

That's where variable payments help dollar value of estate keep pace with ups and downs of dollar's purchasing power.

Result: Investor gets current dollar value when his annuity falls due.

►IN BUSINESS, first five years are the hardest.

Study of Commerce Department figures shows:

57 per cent of business failures occur

washington letter

in first five years, almost 65 per cent in first six years.

Failures are down this year from last (7,513 against 7,761, as of October).

Dollar value of liabilities shows corresponding drop (\$261,029,000 against \$289,495,000).

Note: Based on over-all business population, 9,958 concerns out of 10,000 will not fail in '55.

►INFLATED COSTS distort steel capacity figures. Here's how:

Industry's capital investment this year is nearly double that of '47 (now \$9,200,000,000, \$4,700,000,000 in '47).

In same period, steel-making capacity is up less than 38 per cent.

That means cost of building new capacity now runs about 2½ times that of pre-war days, pushes up amount of new money needed for expansion.

►URANIUM PRODUCTION will quadruple in next decade.

That's estimate of Atomic Energy Commission. It won't be officially confirmed.

AEC puts U. S. stockpile of natural uranium metal at 32,000 tons by end of this year. Stockpile will total 132,000 tons by 1965.

AEC spokesman estimates nuclear power will supply 5 per cent of U. S. energy needs by '65. By 1980, nuclear power will increase its share to 75 per cent.

During same period energy demands will have increased so rapidly that other power sources also will show greater use.

►HERE'S WHY one financial expert fears creeping inflation:

"In recent years--and this year, too--pressure for wage boosts came from the top, from organized labor.

"In 1956, with the new \$1 minimum (wage), industry will feel the pressure from top and bottom.

"That means an upward push on prices--and creeping inflation."

►AMERICANS SPEND more to run their homes than for the homes themselves.

The figures:

As percentage of disposable personal income, we will spend 12.7 per cent of

our earnings this year for housing. For household maintenance: 13.1 per cent.

Here's partial list of what it takes to run a household:

\$3,265,000,000 for furniture;

\$3,610,000,000 for appliances;

\$1,386,000,000 for dishes, cooking utensils;

\$8,361,000,000 for electricity, gas, other utilities;

\$549,000,000 for stationery and writing supplies.

That's partial list.

Commerce Department breakdown shows total household expenditures will come to about \$31,000,000,000 in '55.

This outlay is second only to food in consumer purchases.

►WATCH FOR congressional fireworks over new Office of Defense Mobilization plan.

In brief: ODM wants to establish regional offices throughout U. S.

Purpose: To supervise defense planning more closely.

►BRIEFS: Life insurance company survey shows 350 of 600 families believe U. S. Savings Bonds are safest investment; 42 families think life insurance safest.

. . . Estimated housing needs by 1975 total 26,000,000 units; more than \$1,300,000,000,000 will be spent in same period for construction. . . . While personal income in U. S. is more than triple that of 1929 (\$86,000,000,000 vs \$288,000,000,000), personal income taxes are up 11 times (\$3,000,000,000 vs \$33,000,000,000). . . . Farmers have \$1.22 for each \$1 of debt, says Department of Agriculture. . . . Pension funds in U. S. will reach total value of \$18,000,000,000 this year--and value's going up by \$2,500,000,000 yearly. . . . State legislation is big business: More than 81,000 measures have been introduced so far this year in 46 states, Alaska and Hawaii; 30 per cent are now law. . . . More prosperity, more pounds: Public health clinics are swamped with overweight cases--1,000 are on Washington, D.C., waiting list alone. . . . Grocery stores with meat counters increase by 25,000 in 15 years (to 212,000), while total number of food stores declines by 140,000.

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"Air curtain" doors—now

In the September issue of NATION'S BUSINESS, under "People, Products and Progress," we noted your article on things to come in 1975. One of the items is the open door for stores. Enclosed with this letter is a folder illustrating "Air Curtain" doors, the very thing you are anticipating.

The American Air Curtain Corporation was formed in May. Our first "Air Curtain" door has been installed in the United States in a supermarket; however, it is not yet in operation.

ERNEST GYGAR, *President,*
American Air Curtain Corp.,
St. Louis 4, Mo.

Tip for the wise

We are enclosing our check in the sum of \$1 for which please send me ten reprints of the article "Success Won't Save Your Business" in the October NATION'S BUSINESS.

R. G. SAPPENFIELD
Campana Corporation,
Batavia, Ill.

Reprints available, 10 cents each, from
Business Manager, Nation's Business,
1615 H Street N.W., Washington 6, D.C.

Patent Office promise

We are being forced to produce items that we have patents applied for, and are being laughed at by our competitors who copy and compete against us on these items.

Today, I read an article in the September issue of NATION'S BUSINESS, reporting an appropriation of an additional \$2,000,000 to the Patent Office, above their requested budget. ("Quicker Patent Clearance Promised," Sept. 1955.) This certainly looks good to me as a small manufacturer. This is certainly a move that will help firms that develop new ideas and must produce same to survive and grow in today's market.

The thought occurs that many firms file for patents to keep items protected, and yet do not plan on producing them immediately. Could a department be suggested to handle requests from small business firms which plan on production im-

mediately? This may be out of order, yet it should have some merit for consideration, as it will undoubtedly encourage many firms continually to develop and improve their lines, and in turn improve the production activity of our nation.

J. GLENN FISHER, *Mgr.,*
Fisher Manufacturing Co.,
Hartwell, Ga.

Suggests higher gift range

In your September issue you had an article on charity drives with a guide for givers.

I was wondering if that table is supposed to represent only what wage earners and salaried workers should give to United Fund organizations, as certainly in the higher income salaried groups, ten per cent before taxes is not an unrealistic goal to shoot at.

ROSCOE A. PAGE, *Vice. Pres.,*
Kraft Foods Company,
Chicago, Ill.

Train your own

I enjoyed very much reading the article pertaining to creative thinking and its application at General Electric in the February issue ("Train Your Own Inventors"). We would like very much to copy this article and distribute it to approximately 350 supervisors at Irvin Works. Your permission to copy the article for this purpose would be appreciated.

H. B. SHIMP
U. S. Steel Corporation,
Dravosburg, Pa.

Permission granted.

Cheers from Texas

As adviser for the Army Reserve of Central Texas, I have difficulty in obtaining the information on the Armed Forces Reserve Act of 1955 in a form suitable for dissemination to the youth of Central Texas.

The article in your September publication titled "Military Service Law Works This Way" is the most informative article, in my opinion, that has been commercially published to date and is commendable.

It is requested that the U. S. Army Reserve of Waco, Texas, be

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LOYD TALENT
Lt. Col., Inf.,
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Everyone has to sell

I read this article ("America Needs a Million Salesmen") with much interest. I finished an engineering course in the university and later went into selling unprepared. Everyone should study salesmanship, not necessarily to sell products, but to sell his ideas to his boss or superior. That was my shortcoming in engineering, and why I became dissatisfied. After taking up selling, I learned that my university had sold me short by not teaching me to sell my ideas.

JOE CHASLAIN
Midland, Texas

Texan—also American

Congratulations on the editorial, "We Legislate—Then Learn," in your August issue.

It points out, in a manner readily understandable to all good businessmen, one of the many ill-effects of federal price-fixing of natural gas—a tendency to locate multimillion dollar developments in gas-producing states, even though every other logical consideration argues for locating the plant elsewhere.

As a Texan, I naturally am happy to see this industrial move to Texas. We have adequate space, resources and markets to absorb as much industry as wants to come.

As an American, however, one must also take into consideration the importance of a well balanced national economy as well as military considerations and, thus, realize that whatever promotes national prosperity will benefit Texas as well.

As Texans and Americans, it behooves all of us to resist all steps by the federal government toward further socialization of the national economy.

For these reasons, I believe it would be to the best interests of your businessmen readers to look beneath the emotional furor that has been raised over the Harris Bill to free natural gas producers from federal regulation. Then let them honestly ask themselves if they shouldn't lend every support to the House-passed bill when it goes up for approval by the Senate at the next session of Congress.

A. P. KING, JR.
Austin, Texas



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BY MY WAY

Resuffino



Man proposes, etc.

The difference between my wife and myself is that we both plan things but she does them. This is why we are going to Scotland, Ireland and England—indeed, will have gone there before these words reach the, I hope, gentle reader's eye. My custom is to talk about the future, under the impression that it will never really arrive. I am always surprised when they say, now it is time to go aboard the plane, but my wife is never surprised; she just gets up and goes, and the next thing I know I am eating filet mignon five miles up in the air, and wondering how all this happened. There will be more of this later. I wouldn't put it beyond that woman to have us going on a rocket around the moon, just because I had said, in an idle moment—and those are the times when I do say things—that I thought it would be a good idea.

Yes, and how about soup?

An Italian organization is trying to organize males to bring back the beard. I would join this organization, if asked, any morning at about 7:30, when I shave. At other hours, no. I don't quite see how you can combine



a beard and spaghetti; I should think you could get along with one all right, but not both.

So we went to Scotland

We planned our trip to Scotland partly because both of us, my wife and I, have (or had, rather) ancestors there. Of course we wanted to see the country again, too, having seen it only once, and all too briefly, several years ago. But I think I

would have gone for the lovely names alone.

The English are good at funny names but not so good at beautiful ones. They call a place Upper, Lower or Middle Tooting, or Flopping Road, or Sallows Wallop, and then go home to supper feeling that they have done a good day's work. Which, of course, they have.

But a Scot doesn't do that. He sits and thinks and thinks and thinks, maybe knitting a few socks meanwhile so as not to waste the time. Then he comes up with something like some islands named Rum, Eigg and Muck; or a place known as the Kyles of Bute; or the Braes of Lochaber; or Buchan Ness (and if you can pronounce the "ch" in Buchan correctly you'll be royally received there) or Inverness; or Aberdeen—and go on as long as you like; these names all sing. My father was born in Peterhead, which is pronounced Peerhead. And a mountain is "Ben," a valley is a glen and a stream is a water. So, anyhow, we're going to Scotland, where nothing but the whisky is Scotch—everything else is Scottish.

And a slab of mince pie?

I must have been hungry the other afternoon because I got to thinking of some old-fashioned ways with foodstuffs: putting green or yellow tomatoes on window-sills to turn red; having barrels of potatoes in the cellar, and small boys to sprout them; making watermelon pickles, and the wonderful spicy smell that resulted; keeping buckwheat batter in a stone crock and making griddle cakes from it all winter long; putting doughnuts and cookies in other stone crocks for hungry boys just in from school. Does this still go on? I hope so but I doubt it.

Autobiographical note

An advertisement says that the average human scalp (male) has 121,630 hairs. I can well remember when I had that many. It was quite

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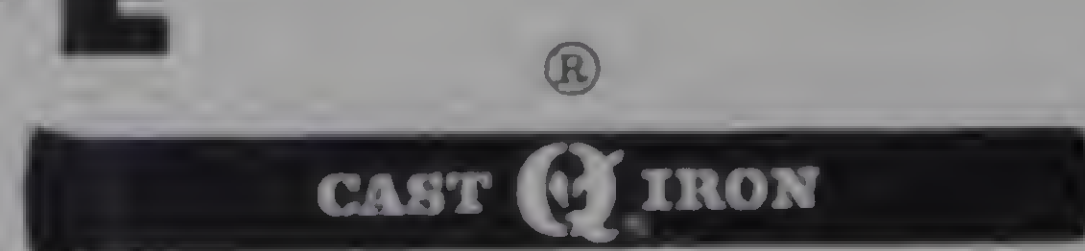
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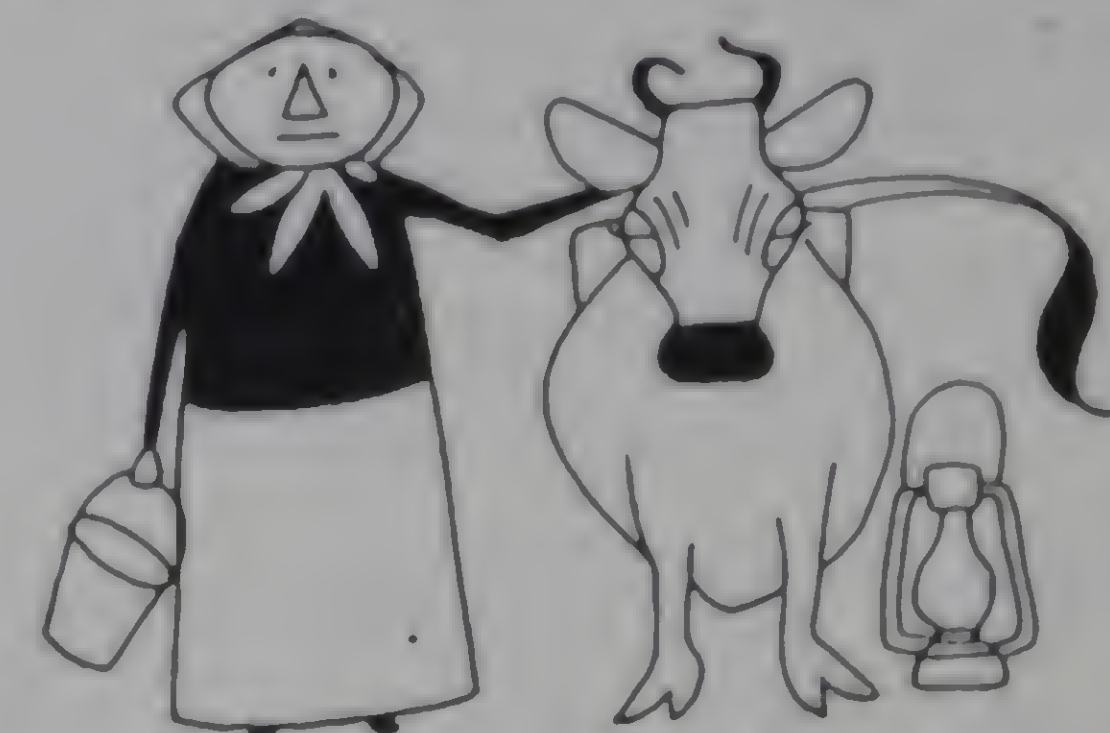
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an occasion, coming as it did between the day I lost my so-called "baby hair" and the day I began to grow what I then hoped was a permanent crop. I was also just beginning to shave, using an old-fashioned razor and pretty nearly skinning myself in the process. In fact, I have often thought of asking a pension on the score of wounds received while shaving. Then came the sad morning when, though the whiskers went on growing, I had only 121,629 hairs on the top of my head. I have even fewer now, though I have not counted them recently. But I have a word of comfort for bald-headed men. This is: So far as I have heard, nobody ever died of baldness.

Mrs. O'Leary's, if any, cow

Careful historians tend to doubt the story that the great Chicago fire of 1871 was started when Mrs. O'Leary's cow kicked over a lantern. I believe, though I am not quite sure, that they divide into several groups. Some say that the cow did not belong to Mrs. O'Leary at all, but to somebody else. Others maintain that Mrs. O'Leary had a cow, all right,



but that it did not start the fire. A third, and even more skeptical group won't admit that there was a cow or, in some cases, that there was a Mrs. O'Leary.

My own feeling is that cows do not kick over lanterns, or did not, even when there were lanterns. What cows do, and always have done, is to put their feet into the milk pail, which nowadays, and even in 1871, seems unsanitary. However, I learn that Mayor Richard J. Daley of Chicago is in favor of some kind of memorial to the real or imaginary cow. I call this unfair. Many of us work hard all our lives long and nobody puts up a memorial to us after we die. I don't envy Mrs. O'Leary's cow but I do resent it.

Who's "remote," anyhow?

I saw a reference to "a remote place," and it set me thinking. All places are remote from somewhere. I am at this moment in the heart of a great city, but to a man dabbling his toes in the waters of a lagoon on a tiny island in the South Pacific I am remote, I am far away. And if he likes it where he is, he is sorry for me, I am so out of everything.

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Trends of Nation's Business:

State of the nation

By Felix Morley



GEORGE LOHR

Eisenhower Is Again at Geneva

WITH THE CURRENT meeting of the Big Four Foreign Ministers the much-discussed "spirit of Geneva" is confronting its crucial test. Can statesmanship transform this universal hope for stabilized peace into reality?

The ice of the cold war was broken when President Eisenhower and Premier Bulganin conferred amicably in the pleasant Swiss city last July. But in the polar regions a summer thaw is only transient. The dominant climate is not altered. The ground stays frozen underneath even though a warming sun shines briefly at top level.

And the political climate, in the relations of the United States and Soviet Russia, is unfortunately Arctic. Many factors contribute to this condition. The ideological conflict, too easily regarded as the most significant, is by no means the only cause of antagonism. One may doubt that these two great powers would be friendly today even if their political and economic systems were identical.



That important point is sustained by recalling the long record of ill-feeling between the French and Germans, both Christian nations with kindred cultures and strongly similar institutions. A common border never made peaceful neighbors out of these peoples of common tribal origin. On the contrary, propinquity served only to accentuate their mutual mistrust.

To an objective and intuitive American mind, like that of President Eisenhower, this bitterness has always seemed tragic, not less so since its ultimate outcome was to degrade both France and Ger-

many from the world leadership they once shared. Nor, as our European commander had good reason to realize, was the Franco-German hostility merely a curious local aberration which this country could safely ignore.

It was the second American involvement in this rivalry that brought General Eisenhower to the White House, making him much more sensitive than most to the far larger and more frightful rivalry between the United States and Russia that has now evolved.

All who have followed his public statements know that from the day of his election President Eisenhower set himself to avert a repetition, on a bigger and deadlier scale, of the suicidal conflict that only ten years ago left Western Europe a mass of ruins. The problem is keyed to the question of why France and Germany, having so much in common, should still have been impelled to destroy each other. If that is explained, then progress on the current issue has been made.

For a question of such serious import, superficial answers will not serve. If one really believes that France and Germany became hereditary enemies because the latter is naturally aggressive, or because the former is ditto, then the conclusion points straight to war between this country and Russia. That thinking suggests that if two powers of fairly equal strength have contiguous domains, then the one that feels itself stronger will always be aggressive against the other. If true when nations have much in common it will certainly be true when national differences are fundamental. And it further follows that the shrinkage of the world brought

State of the nation

by the airplane has made war between great powers more probable as well as more disastrous.

Professional soldiers, like General Eisenhower, seldom fall for the myth that there are good and bad nations. But the well trained military mind does know, from history, that propinquity has always encouraged national belligerency. Neighbor is a nice word, but more so for individuals than for governments. Neighboring nations, when approximately equal in size, strength and capacity, have always been jealous of each other. The United States was fortunate in that its borders were until recently confined to countries far less powerful than our own. Since we do not fear either Canada or Mexico, neither do we dislike them. And with good will on one side of a border there is likely to be the same sentiment across it.

But propinquity between powers of balanced strength seems to encourage ill-will. And, if so, the Stalin policy of extending communism through satellite states, and the Truman policy of containing it, were together leading toward disaster. For the end is necessarily a common border, explosive even without the differences in creed, between the world we influence and that which is influenced by the Russians. It makes no essential difference that this border is as far away as the middle of Korea, in Asia, and the middle of Germany, in Europe. It is still a controversial line of demarcation between American and Russian power, with continuous tension along its whole extensive, and expensive, length.

Futhermore, it may not lessen this tension if the Iron Curtain that divides these imperial spheres of influence is lifted, for exchanges of visitors, ideas and goods. There was no barrier to such interchange between France and Germany. Every day, in peacetime, people and freight shuttled virtually unhindered, to and fro across that border. Any spy could cross either way without fear of detection, and plenty did. Less police activity did not mean less underlying enmity.

There was, 1,100 years ago, a promising Middle Kingdom, separating what is now France and Germany. The great emperor Charlemagne had previously unified all Western Europe, from the Pyrenees to the Elbe. But his successors were less able and the realm split into three parts. The kingdom of the West Franks developed into modern France. The kingdom of the East Franks became the basis of modern Germany. The middle kingdom, comprising the intermediate territory from the North Sea down into Italy, gradually succumbed to pressures from both sides. But traces of it still remain in the independent countries of Holland, Belgium,

Luxembourg and Switzerland—people akin to both the French and Germans yet fully determined not to be absorbed by either.

The middle kingdom, of the dark age, did not endure. But a modern counterpart, making a balancing force out of Western Europe, subject neither to American nor Russian pressures, might well play a more successful buffer role. And, if so, much of the risk of conflict between the two colossi of our day would be averted, thus also lessening tension in the Far East. That, as the alternative to another dark age, was the line on which President Eisenhower was working when he was stricken.

At the summit conference, last July, he was able to convince the Russians that the United States does not want to dominate the developing "middle kingdom" of Western Europe, but merely to assist its unification. That, to our thinking, requires the NATO alliance, strengthened by the addition of a reunified Germany.

The Russians, in their turn, denied any aggressive designs against the West, but said emphatically that they fear a reunited and rearmed Germany, linked by military alliance through NATO with a potentially hostile United States. And the Kremlin has since made clear that it will block German reunification unless the rejoined halves of that severed country are neutralized as between Russia and the United States.

President Eisenhower's unusual stature as a statesman is shown in his appreciation of a certain validity in this Russian argument. He has told Secretary Dulles that to reach a solution we must be discreetly willing to meet the Russian viewpoint half-way. The result was Mr. Dulles' statement, to the U. N. Assembly, that, in return for German reunification, "the Western Powers are ready to advance some over-all plan of European security which would give the Soviet Union additional reassurances." Only two days after that helpful concession the President suffered his heart attack.

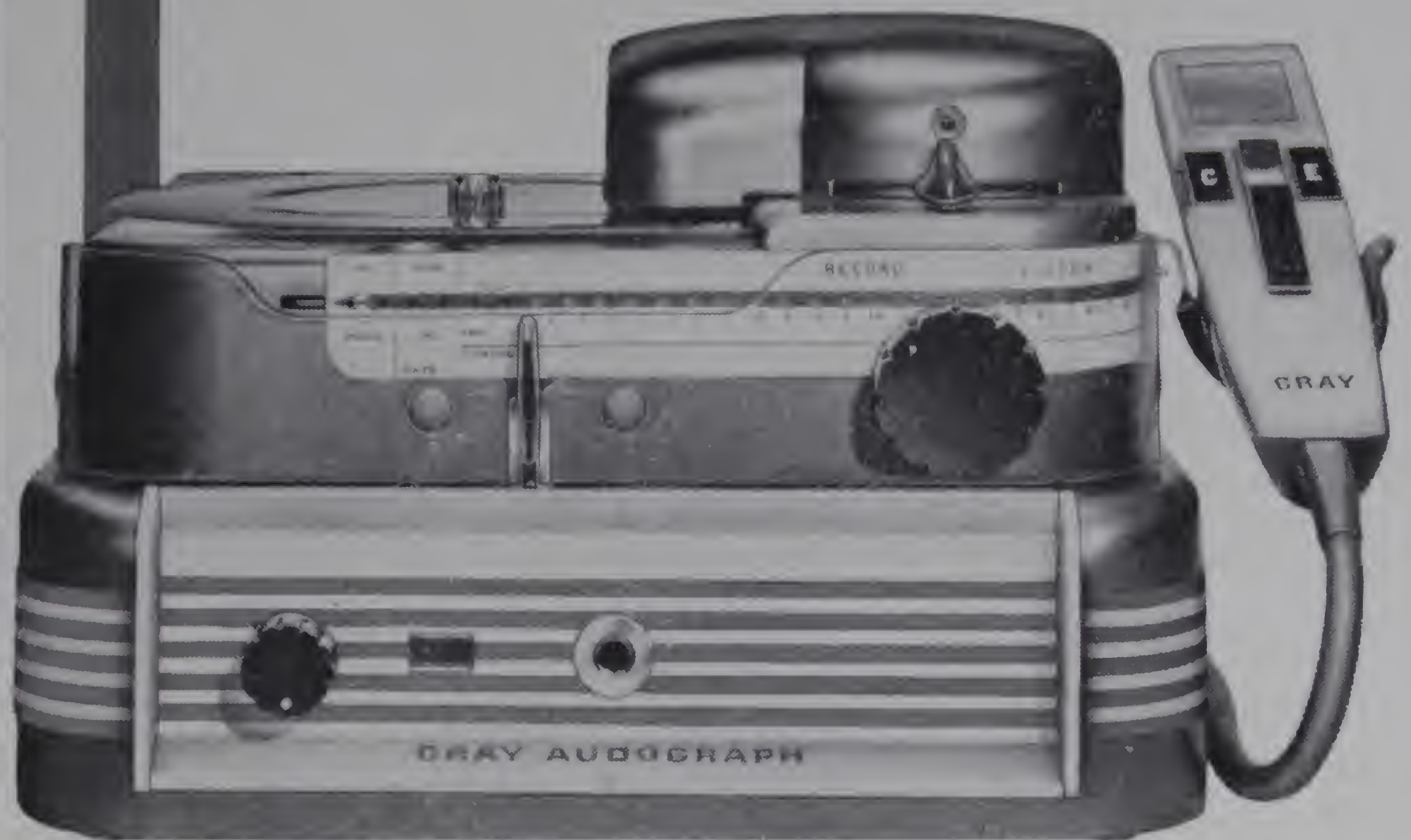
Now the Big Four foreign ministers are meeting again in Geneva, under instructions to give priority to "the reunification of Germany and the problem of European security." The impediments to success are of course enormous and unless the mutual will to cooperate is strong the outcome of the conference will be a turn away from peaceful co-existence, meaning a turn toward war.

Yet, paradoxically, the chances are better because of the President's illness. For throughout the world everyone is aware that his sadly over-taxed heart is set upon improvement in our relations with Russia. And the narrow minds that dislike the spirit of Geneva will be the slower to condemn because to repudiate it is also to repudiate the broad-gauge spirit of Dwight D. Eisenhower.

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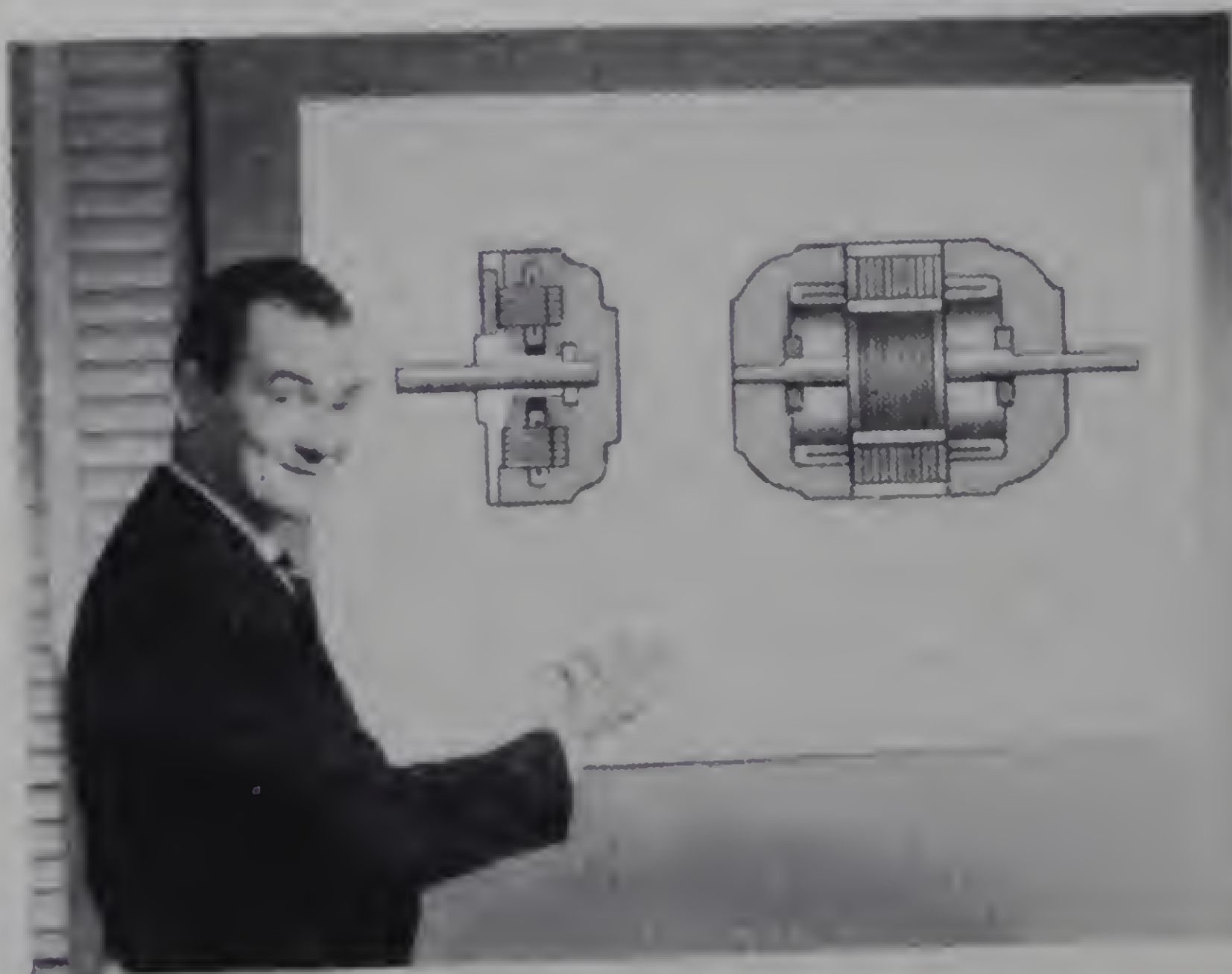
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Trends of Nation's Business:

Washington mood

By Edward T. Folliard



Ike could name G.O.P. candidate

DENVER—When Alexander the Great, in 323 B.C., was asked to which of his lieutenants he wanted to leave his empire, he said, "To the strongest."

The story comes to mind now because of a question raised by President Eisenhower's heart attack. If the Chief Executive decides that it would be in the best interests of the country for him not to run for a second term—and most political realists think that he will so decide—what will he do about his party's future?

Will he tap some favorite and use his immense prestige to try to get him the Republican presidential nomination in 1956?

Or will he, in the manner of Alexander, say in effect: "Let the aspirants fight it out in the convention, and may the best man win"?

There are modern precedents for either course of action. Theodore Roosevelt, as he was preparing to leave the White House, virtually dictated the nomination of William Howard Taft to the Republican National Convention of 1908. Calvin Coolidge, on the other hand, made no effort to sway the Republican convention of 1928, which nominated Herbert Hoover.

President Eisenhower's influence is so great, and his record in the White House so important to the G.O.P. in next year's campaign, that he probably could have his way if he wanted to name the party's standard bearer.

Those who know him well, however, are not at

all sure that he would try to dictate to the delegates. They think such action would be out of line with his character. What is more likely, they say, is that he will do as he did in the case of the Vice Presidential nomination in 1952.

After he himself had been nominated for the No. 1 place on the ticket, he was asked to name his choice for a running mate. His answer was to draw up a list of six men, any one of whom would be acceptable to him. The then Sen. Richard M. Nixon of California was, of course, one of the six.



If General Eisenhower decides to do something like this with respect to the Presidential nomination next year, then we'll have a wide-open convention in San Francisco in August, maybe the most exciting Republican conclave since 1920.

It is likely that the Democrats, who meet in Chicago a week earlier, also will put on a good show. They usually do even when it would seem that there is not much to quarrel about. But now the Democratic nomination seems a far richer prize than it did when President Eisenhower was swinging a golf club and casting for trout. Adlai Stevenson remains the heavy favorite, but there probably will be fireworks before the balloting is over.

Forecasting political events is one of the most hazardous of occupations, as we have seen by what happened in the early hours of Sept. 24 in Denver. At that moment when the President was awakened by a spasm of pain and called out to the First Lady for help, the whole political picture in America was changed in a twinkling. The picture still is confused, so much so that veteran political observers are shying away from the prophet's role for the time being.

Some of the President's close friends—personal as distinguished from political friends—have begun to see a bright side to his illness. Whereas at first they thought of it as an unutterable tragedy, they now believe that it could have been a break, another instance of "Eisenhower luck." They think that in the long view it may have prolonged his life.

In rationalizing all this, they say that it was fortunate, both for the country and for the Presi-

Washington mood

dent, that the heart attack came when it did, rather than early in a second term or in the course of a campaign for a second term.

Now, they say, nobody can tell General Eisenhower that it is his duty to run again; now he can retire to Gettysburg at the zenith of his popularity, and possibly enjoy many years there as a beloved warrior-statesman.

The professional strategists of the G.O.P. don't quarrel with this view. On the contrary, a good many of them share it.

What all of them are thinking about now is how the party can still capitalize on the President's magic, his powerful hold on the American people. They frankly acknowledge that they will have to capitalize on it if they are to win in '56.

These Republicans are well aware of the great strength of the Democratic Party. They have been reminded of it time after time since their own triumph in '52, when "I like Ike" cries were resounding in the land. They have seen the Democrats pick up nine governors, take control of Congress, and gain something like 500 seats in state legislatures.



Dr. George Gallup made a survey last spring that showed that most Americans think of themselves as Democrats. His agents asked a cross section of men and women of voting age how they would classify themselves if they had to register anew at their polling places. Dr. Gallup took the replies that came in, applied them to the whole voting population and came up with a registration of 54,300,000 Democrats, 34,300,000 Republicans and 9,400,000 undecided persons.

This was a disturbing statistic looked at from a Republican standpoint. However, it didn't disturb party leaders at the time, for as they used to say, "We've got Ike." They had seen in '52 how party lines became blurred before his great appeal, as vast numbers of Democrats and independents joined with Republicans in flocking to his banner.

To what extent the party depended on this for victory in '56 was indicated by Vice President Nixon last March. He said that the Republican Party was "not strong enough to elect a President," but must have "a presidential candidate strong enough to elect the Republican Party." He obviously had in mind General Eisenhower.

What other man in the Republican Party can win over a sufficient number of Democrats and independents to give it victory?

The Republican who comes nearest to matching the President's appeal for such voters, if we may again lean on the Gallup Poll, is Chief Justice Earl Warren. In a so-called trial heat conducted by Dr. Gallup last month, Mr. Warren ran ahead of Adlai

Stevenson. But friends of the big 64-year-old Californian say that the slate-makers might just as well forget him. They say that when he declared that he would not return to politics under "any circumstances or conditions," and that his decision was "irrevocable," he meant just that.

If Warren is out of the picture, the popular choice among Republicans—at least at this stage—is Vice President Nixon. He has strong backing among Republican leaders around the country.

But, Mr. Nixon, now 42, also has opposition in his party. A good deal of it is to be found in his own state of California, where there are two other potential candidates for the G.O.P. presidential nomination, Gov. Goodwin Knight and Sen. William F. Knowland. Returned travelers say that the anti-Nixon people in California are using the same argument against him as was used against the late Sen. Robert A. Taft of Ohio in '52: "He can't win."

Nixon's foes point to a Gallup trial heat between Adlai Stevenson and Nixon, run off last month. Stevenson won over Nixon in this 51 per cent to 45 per cent, with four per cent remaining on the fence.

The Nixon boosters argue that in an actual race the outcome would be much different. They say that Mr. Nixon, or any attractive Republican for that matter, would have a good chance for victory on a peace and prosperity platform, and especially if President Eisenhower is able to pitch in with a few well-timed television speeches.



If this is the extent of the Chief Executive's participation, the Democrats will be free of a dilemma that has bothered them for nearly three years—how to criticize him and win votes instead of alienating votes. How much of a dilemma it has been was illustrated by the complaint of Gov. George M. Leader of Pennsylvania, which he voiced at a Democratic rally in Los Angeles on Sept. 15, nine days before the President had his attack.

Said Governor Leader:

"In almost three years in office, the President has enjoyed a tenderness of approach that is unique in America's political history. Even George Washington, who became President by acclamation, before the days of political parties, enjoyed no such protection in press or politics."

There was a lot in what Governor Leader said, too, for Washington once complained that he had been treated worse than "a common pickpocket."

Now it looks as if the Democrats themselves will join in the "tenderness of approach" with respect to General Eisenhower. There are indications that they not only will not criticize him, but will speak of him in sympathetic terms.

Thus he may go down in history as a President who fared even better than our immortal first President from the standpoint of criticism, and this in a country never noted for delicacy in its politics.

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Election issue in '56:

How to keep the boom going

Candidates? That's anybody's guess now
But pocketbook politics will be decisive

A NATION'S BUSINESS REPORT BY HERBERT HARRIS

IN THE 1956 elections, economic issues will be more decisive than all others combined, except in the event of war. On this point both Republican and Democratic strategists agree. They also agree that next year's campaign will bring a new clarity in the contrast between their respective economic creeds. These are already being redefined by each side, for its own reasons, and with great diligence and care.

Even though it is not likely that President Eisenhower will run again, Republican leaders are eager to capitalize on his popularity to transform the G.O.P. from a minority into a majority party.

They have pondered the implications of both confidential and public opinion polls which show that about 49 per cent of the electorate regard themselves as Democrats, but only 31 per cent as Republicans. Some 20 per cent are independents who comprise the country's swing or shift voters.

Since, in 1954, the Democrats captured control of Congress and won 27 out of 48 governorships, Republican chieftains are convinced that they must present a program which can broaden the base of their party's appeal. They are certain that the crux of any such program has to be the Eisenhower doctrine of the progressive moderate in economic affairs and that the more they can spell out this concept, the wider and

more durable will be the support that they can enlist.

The Democrats perceive that the Eisenhower influence has moved the G.O.P. from a right of center to a middle of the road position. Politically this is a nice place to be, especially in prosperous times, but it does tend to blur lines of demarcation between the two major parties. Although the Democrats, for example, initiated social security legislation, the Republicans extended coverage and higher benefits to 10,000,000 more people. Hence the Democrats, traditionally left of center, have to re-identify themselves more sharply. They have to come up with some fresh ideas or at least streamline and repackage some older ones.



**For prevue of
election arguments
turn page**

This is no easy task because the Eisenhower Administration, during the past three years, has modified the most fundamental disagreement, in principle, between Republicans and Democrats: government intervention in the economic process. Until 1953, the Republicans broadly held that our economy, if left to itself, would automatically perform well enough at all times—brilliantly at other times—to provide high levels of production, employment and income; that even occasional slumps which corrected excesses, or weeded out the imprudent, were to be preferred to government interference in the free market, except in wartime, or other national emergency.

The Democrats, during their 20 years in office, came to represent the idea of continuing government respon-

sibility for the successful operation of the economy. They held, broadly, that without government guidance and shoring up, at least at some key points, the whole economic environment would not suffice to maintain U. S. living standards, let alone improve them.

The whole character of this controversy was changed when President Eisenhower affirmed, in his economic messages to Congress, that government responsibility for economic well-being is continuous, and that any or all the weapons of the federal government from public works to tax policy would be mobilized against economic instability and decline.

The question is no longer one of government intervention, *per se*, but to what extent and by what measures. On this score, the difference between Re-

Democrats:

"We built the stabilizers"

OUR PARTY can justly lay claim to being the real defender of the faith in economic freedom. We revived the free enterprise system by reforms which enabled it to surmount its most fateful crisis, to adapt itself to changing conditions in a complex modern world, and to move toward new heights of accomplishment. The stabilizers—from unemployment insurance to farm price supports—which we built into the economy have provided a sounder footing for prosperity. They also virtually preclude recurrence of economic catastrophe on the scale of the 1929-33 period.

But this condition should be regarded only as a base from which the country can go forward to eradicate still serious deficiencies which threaten future economic strength and vitality.

However, the Republican Administration, which has been a beneficiary of the economic safeguards we installed, is content to rest on our oars. It displays a complacent and defeatist attitude toward the so-called minor ups and downs in the

business cycle. While some fluctuations are to be expected in a dynamic economy, there is no reason why they should be allowed to endanger further economic advancement to the extent that they do today. To dismiss them casually is like saying that medical science, having conquered one scourge, should stop research on all other diseases.

PROSPERITY

A far-sighted blending of private and public policies could achieve by 1960, with present technology and skills, a gross national product of \$500,000,000,000 a year, thus boosting living standards by 20 per cent. As a people, we have to lift our sights toward a full employment, full production, full consumption economy all of the time, not just part of the time.

To push toward new frontiers is even more urgent because about 750,000 persons enter the employment market every 12 months.

At the same time, the increasing pace of productivity, now around four per cent a year, is being further

accelerated by automation and the promise of peacetime applications of atomic energy.

Unless the economy is prepared to cope with these trends, it will be shaken by spasms of unemployment (far beyond the frictional 2½ per cent required for a flexible labor force) and by deep income cuts not just for workers, but also for retailers, manufacturers, farmers, everyone else.

When mechanization displaces a man from his job, it is not enough just to say that in the long run technological advance will be a benefit to everybody; to do this and nothing more is to place upon the individual the unfair burden of bearing the short-term cost of society's long term gain.

BUDGET BALANCING

It should be remembered that the federal budget is a flexible instrument of the economy. The budget can best be protected against red ink by protecting the economy first. It is always good fiscal policy to want to balance the budget. But a balanced economy, secure against excessive downswings, is the most sensible method for achieving a balanced budget and keeping it that way.

It is the triumph of bookkeeping over economic progress to make a fetish of the constantly balanced budget at the risk of inadequate defense, inadequate education, inadequate national income, inadequate foreign economic policy, and the

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publicans and Democrats has become a difference in degree rather than in kind.

Despite this new consensus on the role of government, the 1956 campaign will be no sham battle. Many genuine conflicts over economic emphasis and technique, over what should or should not be done, and by and for whom, still persist.

Translated into practical politics, this signifies that dominant figures in both parties think that it is an oversimplification to assume that the sheer fact of prosperity, in itself, can any longer guarantee victory at the polls.

They believe that the new temper of the times demands something more. They are convinced that a pivotal proportion of Americans want to be assured

that prosperity can and will be continued at or around the present level; and that the party which makes the best case for itself as being able to use the economic powers of government for that purpose is going to win the election.

This new factor in our pocketbook politics explains why each party, earlier than ever before, is developing guidelines on economic policy and programs.

Some will be accepted, others revised, still others thrown out.

All are still in the suggestive stage, more in the nature of raw material than final proposals.

When taken together, however, they foreshadow the basic outlines of the Democratic challenge and Republican response for 1956.

Republicans:

"Help the people help themselves"

OUR PARTY affirms that the way to make economic freedom work is to work through the ways of economic freedom. The government's economic functions should therefore be performed to help the individual to help himself. The will and willingness of people to exert effort on their own behalf do not alone determine the ability of the private economy to generate goods, jobs, incomes. People must also have confidence in their economic prospects, a consideration neglected or derided by some theorists. Yet such psychological motivations and attitudes are as crucial to economic advancement as are physical resources and facilities.

To instill and strengthen a spirit of confidence in the investor, the businessman, the farmer, the worker, the members of the professions and everyone else is an underlying aim of our economic policy. That policy, in turn, reflects the belief that the federal government encourages vigorous and venturesome economic activity when it *a*, puts primary emphasis on private initiative in open competitive markets; *b*, curbs mo-

nopolistic abuses whether in business or labor; *c*, assigns to the private economy as much of the government work load as possible; *d*, checks inflation or recession, not by drastic direct controls over prices and incomes, but by such moderate indirect methods as easing or tightening the money supply, and raising or lowering interest rates; *e*, cooperates with the localities and states on problems of health, unemployment, old age, slum clearance and new economic opportunity for the less fortunate.

The Employment Act of 1946 declares, among other things, that it is the government's responsibility to help attain "maximum employment, production and purchasing power" and "to foster and promote free private enterprise." The two ideas are inseparable. They rise or fall together. The Democrats consistently underestimate the power of free enterprise—when liberated from the restraints of government coercion—to energize itself and to sweep forward on its own momentum, constantly renewed by its own incentives and innovations.

The Democrats profess a similar faith in free enterprise. Their language is often the same as ours, but the meaning is different. Their stress is upon defeatist devices to deal with business contraction. Our stress is upon positive measures to release the creative capabilities of business as chief agent of economic growth, both immediate and long term. We oppose the Democratic view that new public projects, unbalanced budgets, compensatory spending are indispensable to economic well-being. Our view is that, while extra government outlays may be required in case of emergency, they should be always regarded as temporary correctives or expedients, never as the permanent regimen for economic health.

PROSPERITY

The test of our economic approach is the new era of good feeling, the trust in government actions, the optimism about the future that have burgeoned during the present Administration. In this atmosphere, nourished by our economic policy, almost every phase of economic activity has surged to record heights. Gross national product is moving toward \$390,000,000,000 for 1955, while national income will hit around \$320,000,000,000. Employment at more than 65,000,000 is the highest in history. So, too, are per capita disposable income savings at the rate of \$1,600,000,000 a month, and factory earnings at \$77.11 a week, nine per cent above last year.

Industrial production has reached

turn to page 31

Democrats:

continued

wastes of unnecessary economic contractions and deficits.

LABOR

Misgivings over the threat to steady jobs posed by the newer technology pervade the ranks of labor. It should know that it can rely upon our party not to allow men, who, through no fault of their own, have been supplanted by machines, either to undergo undue hardships or become outcasts of the economic system. This point has not been entirely lost among the 1,800,000 workers who exhausted their unemployment insurance benefits in 1954.

Organized labor in particular can be expected to remember that its ability to fare as well as it has recently in pay, fringe benefits and the guaranteed annual wage can be, in large measure, traced to the Wagner Act passed by Democrats. This act welded into the national policy and consciousness labor's right to organize and bargain collectively.

Indeed, the very right of unions to exist, long denied, was by this means irrefutably established. From 1933 to 1953, dues-paying union membership climbed from less than 2,700,000 to more than 15,000,000. Yet under the Republican Administration this vast segment of the population has been treated as a stepchild. The Department of Commerce and its Business Advisory Council have more to say about labor affairs than the Department of Labor. The Administration has not only failed to offer revisions in the antiunion sections of the Taft-Hartley Act but has also seen to it that, in the Department of Labor itself, the labor movement does not enjoy a consultative status comparable to that of business executives in Commerce.

Their advice on the course of the economy is no more important than that of labor leaders who are especially aware of the need to match mass purchasing power with that of mass production. They know, for example, that it is not merely for humanitarian but for sound economic reasons that the families who now exist on less than \$1,000 a year should get a chance to lift their incomes. Some four fifths of them dwell in urban or rural slums, breeding grounds of juvenile delinquency.

Decent living quarters are a first step toward restoring the morale and incentive of the breadwinners, and

in keeping youngsters at home. Around 200,000 public housing units a year, as against today's token 45,000, should soon be scheduled. The very construction of the former would be a hedge against the hazards of a consumption slump.

Similarly, millions of people of 65 and over exist on federal old age insurance. Even with the 1954 amendments to the social security system, the average monthly checks of \$50 to \$60 means that for most recipients their standards of housing, diet, medical care, apparel are around 75 per cent below the national average. To raise their buying power, annual payments under old age and survivors assistance programs should be gradually doubled.

BUSINESS RECESSION

The recession between the middle of 1953 and early 1955 resulted in a \$30,000,000,000 annual rate of loss in goods not produced and services not rendered, or the equivalent of \$575 for every family. It caused a \$5,000,000,000 drop in corporate profits, a \$5,500,000,000 drop in government tax revenues, a \$3,000,000,000 drop in farm income.

Such huge economic deficits occur not just when national production is slackening but when it fails to enlarge sufficiently to keep in step with increased output per man-hour and growth in the size of the labor force. Alert federal action could have cured the more harmful effects of the 1953-55 recession. It would have entailed an added federal outlay of around \$2,000,000,000 for defense, highways, schools, health, a raising of personal income tax exemption by \$200 (which would have released an extra \$4,500,000,000 for consumer spending) and related steps to stimulate mass purchasing power.

It is demand which creates supply

and is the clue to economic expansion along all fronts. Investments in new plant and equipment may at a given moment depend upon financial reserves, the tax picture, credit availability. But more than anything else, it is the prospect of added sales which stimulates outlays to expand productive capacity. This means more jobs, more ability to consume.

BUSINESS AND ANTITRUST

The dangers of the present prosperity are not just creeping inflation and too much on-the-cuff living. It is too unevenly diffused. In the first three months of 1955, for example, as against the same period for 1954, the profits of a handful of giant corporations, with assets over \$100,000,000, were up \$330,000,000; but the profits of the multitude of the smallest corporations, with assets up to \$250,000, totaled \$5,000,000. Business failures for larger firms (liabilities from \$100,000 to \$1,000,000) were down 16 per cent; failures for the small firms (liabilities to \$5,000) rose seven per cent.

Whether in boom or recession, the same pattern prevails. When the second quarter of 1954, for example, is compared with that in 1953, the biggest industrial corporations (assets more than \$100,000,000) increased profits after taxes by ten per cent. But profits after taxes for the smallest category of manufacturers (assets up to \$250,000) declined 43.1 per cent. Profits after taxes for the intermediate firms (assets from \$250,000 to \$10,000,000) went down 25.7 per cent. In brief, big business always comes out on top and to a disproportionate extent.

Our party finds it hard to believe that the managements and facilities of the small and intermediate firms are generally that much inferior to those of big business whether in handling civilian or defense transactions. The causes for this discrepancy in profit making have to be searched out in the field of competitive opportunity—a point confirmed by the rising number of protests to congressional committees during this

(Continued on page 92)



GOP Chairman Leonard Hall and Democratic Chairman Paul Butler, tell, on pages 96 and 100, why their parties will win next year

Republicans:

continued

140 per cent of the 1947-49 average, while private investment in new plant and equipment (excluding agriculture) is nudging the \$30,000,000,000 mark. Total new construction (private and public) for homes, schools, churches, stores, office buildings and roads is nearing a new peak of \$41,800,000,000. Corporate profits, after taxes, for the second quarter of 1955 were \$21,200,000,000, still another milestone; net working capital of U. S. corporations will surpass \$98,000,000,000 by year's end. Retail sales are more than seven per cent higher than in 1954 with major appliances and furs up 32 per cent, fine jewelry and watches up 25 per cent, rugs and carpets up 15 per cent, cameras and sporting goods up 13 per cent, and farm equipment up 12 per cent. Some 4,500,000 families now own more than one car as against 1,000,000 families in this category 15 years ago.

Moreover, this prosperity has been achieved without inflation. In recent months the price index has risen at most by 0.1 per cent; this means an increase of only ten cents for every \$100 worth of goods the consumer buys. Gains in earnings are real, not fictional as under the Democrats. Competition and ever increasing output can be expected to hold the retail price line despite higher manufacturing costs, notably for labor and materials. Credit curbs now in effect can be counted on to inhibit tendencies toward blue-sky expansionism. Although inventories have been growing toward a \$79,000,000,000 total, they are merely keeping in step with demand.

Incomes also have been leveled up. Contrary to a favorite Democratic claim, the bottom fifth of U. S. families, since January, 1953, have obtained income gains of 14 per cent, while the top fifth registered gains of three per cent. People in the middle brackets have done extraordinarily well. The average American is earning 40 per cent more than in 1945.

BUDGET BALANCING

All this has been accomplished while federal spending has been consistently reduced. In the second quarter of 1953, for example, federal outlays were at an annual rate of \$61,000,000,000 and the gross national product was \$369,300,000,000. But in the second quarter of 1955, federal outlays had been cut to an

annual rate of \$45,300,000,000 while gross national product had risen to \$383,000,000,000 (minimum estimated). In other words, despite a decrease in federal spending of \$15,700,000,000, the gross national product will have increased by at least \$13,700,000,000. This fact is the clincher refutation of the Democratic argument that prosperity depends upon lavish supplements of federal expenditures.

LABOR

In accord with the Republican precept of fair play for all economic groups, labor is regarded not as a ward of the state but as a private entity on a par with business. Our Administration has favored at every turn the settlement of wage and other disputes between managements and unions by means of collective bargaining with a minimum of government intrusion. Strike losses for the first three months of 1955 were one half those of 1952 and one sixth those of 1950.

Only a Republican type of prosperity could have enabled unions to negotiate the guaranteed annual wage and other employment stability pacts. These were made possible by industry's faith in its economic future. That same faith also explains new employer commitments under profit-sharing and pension plans now more numerous than ever.

The take-home pay of all workers, whether organized or not, is the best on record. The buying power of the factory pay envelope for the employee is 11.6 cents greater than in 1952. The more effective enforcement of the Fair Labor Standards and Walsh-Healey Acts resulted, in the year of 1954, in back wages of \$6,500,000 for 85,000 employees.

Whatever the political preferences of union officialdom, the ever larger number of workers, organized and unorganized, who are moving to better neighborhoods, buying their own homes, and sending their children to college, are aware of the reason for these improvements. So are the 450,000 low income people provided with low rent dwellings in the first 2½ years of our Administration.

BUSINESS RECESSION

Still another proof of the private economy's capacity to generate its own high levels of prosperity when a climate of confidence prevails is the

way the country sprang back from the recession that occurred between the middle of 1953 and 1955. In the main, this was an inventory downswing, complicated by the end of the Korean war and by cutbacks in defense contracts. Indeed, between the first and third quarters of 1954, federal purchases declined at an annual rate of \$7,000,000,000.

But the private sector of the economy developed its own recuperative head of steam. Spending by investors, businessmen and consumers, along with that of localities and states, went up faster than federal outlays went down. Gathering forces of recovery were sped by Administration steps to reduce taxes, allow more generous depreciation write-offs, and loss carry-backs as income tax deductions, to lower rediscount rates, to quicken housing and highway construction. Hardship industries were assisted—shipbuilding by means of a new construction program, and zinc and lead mining by revisions in the buying schedule for defense stockpiling.

In short, a Republican Administration, instead of embarking upon a program of vast new federal spending, relied upon the self-propelling features of a free economy and the selective and sparing use of federal tools to stimulate private spending.

BUSINESS AND ANTITRUST

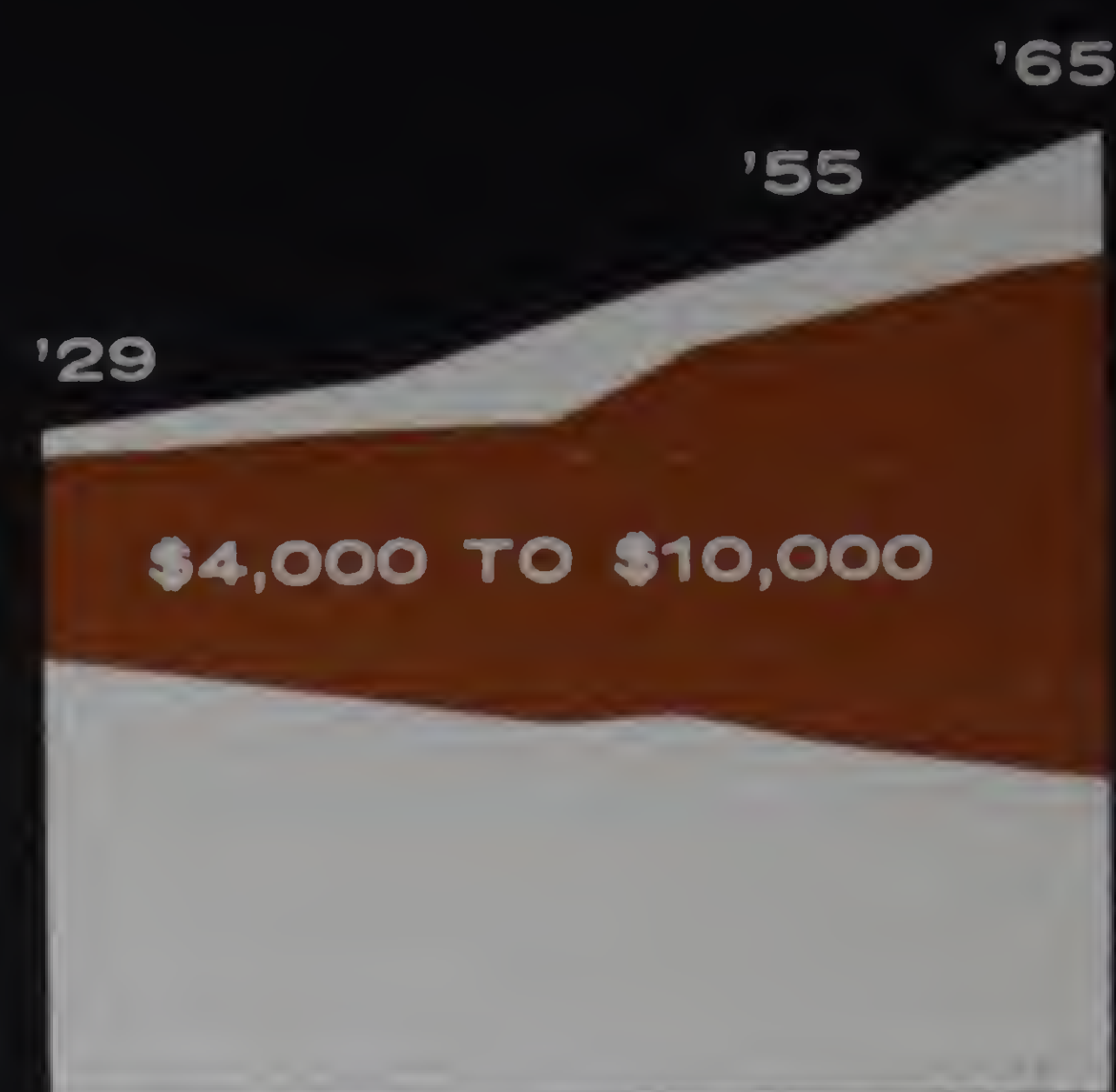
We have been providing every size of business with an environment in which it can prosper and grow. We believe that business is so interdependent that the rising tide lifts all the boats. Today there are more business units per capita than ever before. To keep the road open to talent, competence and ambition in business is our constant preoccupation.

The Anti-Trust Division in the Department of Justice has instituted around a third more suits in less than three years than the previous Democratic Administration in the same amount of time. The aim is not doctrinal perambulation but to abolish restraints upon entry into business, to crack down on price domination, to prevent monopoly before it occurs, to invigorate competition at all times. It has, typically, removed clogs on electronic research. It has spurred competing plane and shipping lines to South America to ease trade with that area.

It has thwarted merger in the steel industry lest a start be made toward a European cartellike structure. It has approved mergers in the automobile industry to enable smaller companies to improve their competitive positions. The Federal Trade Commission, in handling 25 per cent

(Continued on page 97)

GET READY FOR A BOOST IN SALES



1 Rising incomes mean bigger markets

By ROBINSON NEWCOMB

New survey shows how middle class buying power is growing—and why it will continue to grow

2 Selling will become marketing

By PETER F. DRUCKER

Five essential steps will make efforts of individual salesmen more effective

3 Here's how stores will face it

By WROE ALDERSON

The downtown section—by doing what it can do best—will be the center of retail trade

1 Rising incomes mean bigger markets

THE STARTLING growth of the American middle-income and middle-rich classes is increasing markets, changing buying habits and raising our standard of living. A new study made for NATION'S BUSINESS under the supervision of Hyman B. Kaitz, Bureau of Employment Security, U. S. Department of Labor, from official government sources shows this growth in terms of 1955 dollars after taxes for the first time. Previously, figures have been hard to interpret because a \$4,000 income after taxes in 1955 does not mean what it did in 1941 or even in 1950.

Put on a comparable basis the figures show:

- ▶ The number of consumer units with incomes of \$4,000 or more, after taxes in 1955 dollars, has increased by 85 per cent since 1941.
- ▶ The population has increased about 23 per cent, and the total number of consumer units about 25 per cent since 1941.
- ▶ The number of consumer units with incomes of \$4,000 or more has therefore increased at a rate about $3\frac{1}{2}$ times that for the population as a whole, or for consumer units as a whole.

The next ten years will bring a further increase in this income group of some 33 per cent. Meanwhile the units with less than \$4,000 income after taxes have become, and are becoming, fewer and fewer.

A Federal Reserve Board study this year shows the tremendous impact of this income increase:

Those with income above \$4,000 are 60 per cent more likely to buy major household equipment or furniture than those with incomes below \$4,000.

Those with income above \$4,000 buy about four times as many new automobiles per 100 families as those with incomes below \$4,000.

Those with incomes above \$4,000 are likely to buy about 60 per cent more television sets per 100 families in any one year than are families with incomes below \$4,000. They are more likely to travel and to go first-class, to patronize good restaurants frequently, to spend for things which families with less than \$4,000 per year can buy only occasionally, if at all. The increase in the number of households with incomes over \$4,000 is therefore a major factor in the sustained prospects of many markets.

A review of the past 15 years brings the reasons for today's prosperous conditions into sharper focus.

From 1941 to 1950 the number of consumer units rose about 18 per cent—but the number with incomes from \$4,000-\$10,000 (in constant 1955 dollars after taxes) rose about 47 per cent, roughly $2\frac{2}{3}$ times as much. The rate of increase in the number of all consumer units with incomes over \$4,000 was also about $2\frac{2}{3}$ times the rate of increase in the total.

From 1950 to 1955 the number of consumer units

increased six per cent—just over 3,000,000—but the number with incomes from \$4,000 to \$7,000 rose more than 20 per cent, and the number with incomes from \$7,000 to \$10,000 rose more than 40 per cent. Meanwhile the number with incomes under \$4,000 decreased by ten per cent and the number with incomes above \$10,000 continued to grow.

The average household income now appears to be more than \$5,250 and more than 80 per cent of all households appear now to have incomes exceeding \$4,000. More than 50 per cent of all households now have incomes between \$4,000 and \$10,000. The below-\$4,000 groups are becoming heavily weighted with pensioners, farmers on marginal land, the handicapped and those living in depressed areas or in regions that have not been fully developed.

There are sound reasons for this increase in the middle class and for expecting it to continue. To begin with, the record indicates that each year the workers of this country have been able to turn out about two per cent more per hour than they turned out the year before. Every 35 years, on the average, the output per hour has doubled.

Obviously as output per man-hour increases, the goods and services available per worker and per family increase, too. Standards of living rise. This is reflected not only in the increased amount of goods consumed but in the shorter hours it is necessary to work each day to satisfy the basic needs and provide an increasing proportion of luxuries.

Production of goods and services is today roughly about eight times as much per hour worked as it was in 1850 and probably more than 15 times as much as it was at the time of the War of 1812.

Looking into the future, we can assume that this increase of two per cent per hour will continue. To be ultraconservative, we will assume also that the number of consumer units with incomes below \$4,000 will decline very slowly.

If federal income taxes are cut appreciably, if unemployment stays below an average of four per cent, if pensions are raised, or if other developments cut into the number with income below \$4,000, the projections used here will err on the conservative side.

Now, in the next ten years, the population is expected to increase about 15 per cent, and the total number of consumer units about 7,500,000.

This conservative forecast gives an increase in the number with incomes over \$4,000 of one third in the next decade. The increase in the number with incomes from \$4,000-\$7,000 will be about a sixth, and the increase in the number with incomes from \$7,000-\$10,000 will be about two thirds. If we were to assume that the number with incomes under \$4,000 after taxes would drop at as fast a rate in the next decade as it has in the

SALES BOOST

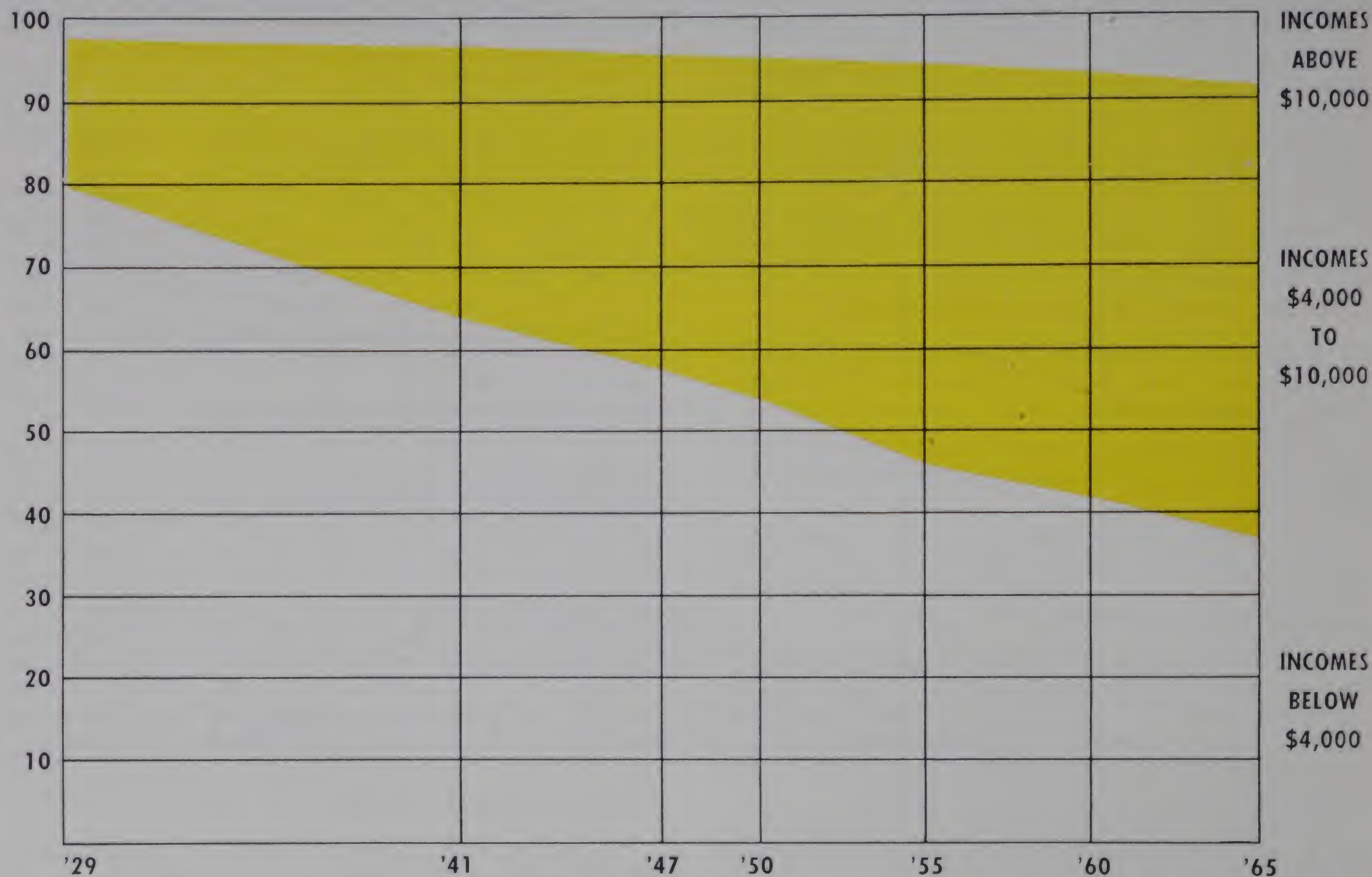


This month's cover shows how the middle class income group has increased in relation to other groups and population rise

In 1929 less than 20 per cent of consumer units had incomes of \$4,000 to \$10,000. Now 48 per cent are in this range, and 55 per cent will be by 1965. Fifty per cent of households are there today

Per Cent

Incomes figured in 1955 dollars



1929 data from Brookings Institution. Data for 1941 to 1955 based on official government figures

past five years, we would forecast a much larger increase in the \$4,000-\$7,000 group.

The increase in incomes has already reached the point at which the greatest growth is in the groups with incomes of more than \$7,000.

From 1941 to 1950, the greatest growth was in the \$4,000-\$7,000 group, with a decline in the proportion under \$4,000. But by 1950, the greatest growth had shifted to the \$7,000-\$10,000 group, and it will stay there for much of the next decade. By 1965 the greatest growth may have shifted to those with incomes of more than \$10,000.

Even these conservative estimates promise that by 1965 the proportion of households with incomes exceeding \$4,000 will be about 67 per cent in contrast to the 52 per cent over \$4,000 in 1950.

Housing offers a good example of the way such income changes affect markets. About 1,200,000 new units a year were built, on the average, from 1950 to 1954. The number of occupied housing units increased at an annual rate of a little more than 800,000. The number

of occupied nonfarm housing units increased at an average rate of less than 1,000,000 a year, and the number of married couples increased by less than 300,000 annually during this period.

This high rate of construction relative to household and family formation means three things in particular are happening to the housing market, in part at least as a result of improved incomes:

►First is improved housing. Roughly 150,000 households a year have shifted from rural-farm to nonfarm income sources since 1950. The number of households classified as rural-farm by the Census dropped from 6,300,000 in March, 1950, to 5,500,000 in April, 1955, according to a Bureau of the Census report released in August.

The families who shift to nonfarm sources of income may or may not continue to live in the country, but the higher incomes these families generally receive when the wage earners get nonfarm jobs enable them to improve their standard of housing, if they so desire.

►Second, the improved income situation means that possibly 350,000 or more units a year are being torn down, abandoned, converted, or allowed to stand idle. As more families each year find their income rising they can afford to move to better housing without government orders or intervention. Many of the houses abandoned have no takers. There are too few in the low-income groups to fill them up. So, for every three new houses we build, we are discarding one old house. That is elimination of substandard housing of an effective sort, without government subsidy, or intervention from Washington.

►Third, improved incomes are providing more and better space per person. Families are undoubling. The number of married couples with no home of their own declined more than 700,000 from 1950 to 1955. More widows are maintaining their own quarters. The dissolution of families by death or other causes does not as often force the remaining members to give up their homes. So the number of units occupied is rising faster than the number of families, and the number of persons per room is dropping.

Other things are happening, too. For instance, home ownership is rising. The proportion of families with incomes less than \$4,000 who own their own homes has increased only slightly, but 55 per cent of all families now own their homes, an increase of about ten per cent in five years. More than 1,000,000 households are being added each year to the number with incomes of more than \$4,000. That is almost exactly the average increase in the number owning their homes.

For every new renter at least one old renter shifts to home ownership, and the total number of renters is dropping because more families can afford to own their homes than was ever possible before.

The increase in incomes has also made it possible to buy better homes. The median cost of houses bought in 1950 was about \$8,500. In 1954 it was \$10,500. Preliminary figures indicate that in 1955 it was considerably more than \$11,000. The real average value of houses bought has been going up about \$500 a year, and the increase since 1950 is enough to add at least one bedroom to the average house.

About 600,000 households a year are being added to the number with incomes of more than \$7,000—that is, to the number which can afford housing worth more than \$12,000, so we can expect a further increase in the building of better housing. The Bureau of Labor Statistics reports, for instance, that about 46 per cent of the houses built in the first part of 1954 were valued at less than \$12,000—that is, could be bought by families with incomes under \$6,000. But more than 80 per cent of the increased number of households are accounted for by the \$7,000-and-up group. And nearly 60 per cent of the increase is in the \$7,000-\$10,000 group. So most of the construction should be in the \$12,000-\$20,000 group. Only 43 per cent of the new houses started in the first part of 1954 was in this group and about 55 per cent in the first part of 1955. A still further increase in the proportion of higher-priced houses is coming.

A study of buyers' preferences by the University of Michigan showed a desire for brick, for more rooms, and for more bathrooms than were generally available. Half of those who expressed a choice of material wanted brick, and two thirds of those expecting to pay \$15,000 or more for their house wanted brick. But only about 20 per cent of those buying were able to get brick in 1950. The proportion increased to 29 per cent in 1954, and to 33 per cent this year.

We may expect to see an expansion in the capacity of brick plants as a result in part of the higher incomes.

Home buyers want more room. The Federal Reserve Board reported this year that about 30 per cent of owners of houses of four rooms or less were dissatisfied, and about 35 per cent of renters of houses of not more than four rooms wanted larger quarters.

More than 45 per cent of the families interviewed also wanted two or more bathrooms. But apparently less than 20 per cent had two bathrooms. Less than 40 per cent of even the \$15,000-\$20,000 houses built in 1949 had two or more bathrooms. So the potential market here, too, is great. The proportion of new homes with two or more bathrooms will rise—and with it the demand for plumbing fixtures. A mild boom is ahead for this industry.

With 85 per cent of the growth in the number of households taking place in the next five years in the \$7,000-and-up class—in the \$12,000-and-up housing market—it is also obvious that builders who install air conditioning are going to get the business and that contractors who can put air conditioning in existing houses are going to be busy.

Existing inadequate houses may decline as the demand for them decreases. This may stimulate the remodeling market. A new, promising business is awaiting imaginative small contractors here.

The housing potentials are too many to catalog. About \$25,000,000,000 a year will be spent on building new or improving old houses in the next five years. That market alone will represent more than six per cent of the total economy of 1955.

Other markets are obvious too. The automobile market, for instance, is just now showing its strength.

In 1954, more than three times as many new cars were sold proportionately to purchasers with incomes of \$4,000-\$7,000 as to purchasers with incomes under \$4,000. More than six times as many were sold proportionately to purchasers with incomes over \$7,000. As the proportion with incomes above \$4,000 rises, the number of new car sales will increase sharply.

So will the number of two-car families. A Federal Reserve Board survey suggests that about three per cent of spending units with incomes under \$4,000 own two cars, while eight (continued on page 78)



Economists find the consumer unit a more precise measure of spending than the individual. Such units are of two kinds: household units and spending units. If two families share the same house, for instance, they form a household unit in such purchases as rent, utilities. They form two spending units in purchases of clothing, food. If one family moves to its own home, the number of household units increases, spending units do not.

Schools' future takes shape this month

- ▶ Should school taxes be increased?
- ▶ If so, how?
- ▶ What kind of training and experience will your future employees have?
- ▶ How does a community get good schools?
- ▶ How these questions are answered will depend on how well businessmen keep informed on the rapidly changing school situation

What to expect of the White House Conference



AMERICA'S educational system faces a continually rising student load, plus mounting demands for higher quality instruction.

For every 100 pupils enrolled today, we had only 71 in 1945. In 1960 we will have 120. In 1965 the number will be 134.

All American children except a fraction of one per cent now attend elementary schools. In 1900 only 11 per cent of the high school age youths were in school. The proportion is now 72.5 per cent.

Wider realization of education's critical problems is producing a reexamination of our philosophy of education.

At the end of this month—Nov. 28 through Dec. 1—about 2,000 persons will meet in Washington for the White House Conference on Education.

Armed with recommendations from more than 4,000 local and regional meetings and 53 state and territorial conferences, they will exchange ideas, discuss school problems, analyze major questions, and prepare conclusions and recommendations for the President.

How the President will use these recommendations has not been stated.

This educational stocktaking began a year ago with local and regional conferences. State or territorial conferences followed. To assist in the planning and conducting of these conferences, the President's Committee for the White House Conference on Education was set up. Its 34 members include businessmen, labor leaders, educators and others. Chairman is Neil H. McElroy, of Cincinnati, president of the Procter & Gamble Company.

Delegates who will come to Washington, for the most part, will have taken part in state and local conferences. About a third will be professional educators. The majority will be from business, labor, agriculture and other fields.

The White House Conference, in the words of its director, Clint Pace, will produce no magic formula. It will, however, intensify national interest in school problems. It will focus attention upon the recommended courses of action. Solving school problems then will be up to the citizens.

Basically, these problems fall under six headings. For the guidance of the Washington delegates, subcommittees of the President's Committee have prepared data providing background and showing the points at issue on each of these six subjects.

The six subjects, and the issues as described in the guides, are these:

1. What should our schools accomplish?

Some people believe that the school should assume every responsibility for which there is real social need.

Others would limit the scope of school responsibilities and let the family, the church or other groups undertake development in many lines, including:

Intellectual skills: Opinion differs as to what extent intellectual development should be attempted. Ideas about standards for intellectual work also differ.

Citizen responsibility: One group believes that the schools must acquaint young people with local, state, national, and international affairs and arouse a sense of responsibility for action loyal to the American way of life.

Their opponents point to the danger of letting states, through schools, have power to emphasize a specific kind of citizenship. Young people, this group says, must get from the school the skills and knowledge upon which to base personal judgment.

ENROLLMENT JAM:



for every **71** pupils in '45
we have **100** today,
will have **120** in 1960,
and **134** in 1965

we have:
in elementary schools **29,038,000**
in secondary schools **7,680,000**
in colleges, universities,
and technical schools **2,839,000**
39,557,000

estimated rise in
next ten years: **13,600,000**

MARTHA MCMILLAN ROBERTS

Occupational skills: Some hope schools will emphasize general education and cultivate skills of wide applicability. This group would leave job training to industry, government, or family.

Others expect vocational training on the high school level. This group points to the many pupils who have no interest in books but who can apply themselves to specific tasks. Without vocational training, this side holds, many adolescents would drop out of school.

Emotional maturity: One group says schools should try to give young people understanding of their social relations. Opponents regard this as the job of home and church.

Social adjustment: According to one view the schools, as the only institution in touch with substantial numbers of youth, should lead in solving problems of juvenile delinquency. Others say the school's role is to cooperate with social institutions.

Racial integration: Some believe that equal opportunity for all men is basic in a democratic society. Others believe the schools cannot impose a national policy and, because race relations vary, such problems must be worked out locally.

Religious and spiritual development: Although direct religious teaching is prohibited, one group holds that such teaching is a responsibility of schools, based

on the premise that religion is an integral part of our culture.

Another group holds religious teaching a duty of the home and church.

A third group feels that "every agency concerned with the education of the young is committed to encouraging young people to develop a system of ethical values which will guide their moral judgments and their conduct."

Health and physical education: The right of schools to be concerned about health and physical fitness is generally accepted. Opinions differ, however, regarding the extent of this obligation. One group views physical and mental health problems as a responsibility of family, medical men, and social agencies. Others, with opinions varying from area to area, believe too much emphasis is put on school athletics and that not enough students benefit from team sports.

2. In what ways can we organize our school systems more efficiently and economically?

The subcommittee studying this topic points out that there are, in fact, 48 patterns of school administration in the U. S. and that each is constantly chang-



PHOTOS BY MARTHA MCMILLAN ROBERTS

New teachers:

needed	205,000
available	86,696
Deficit	118,304

Why? Low birth rate in '30s
Low pay in teaching
Loss to other vocations

ing. The group concerns itself with these fundamental problems:

Role of school district: There are 59,270 school districts in the U. S. In 1932 the figure was 127,000. Of today's number, 7,676 no longer operate schools.

In reducing the number of school districts, the question of size brings many problems. Generally, it is maintained that, for the sake of efficient operation, high schools should have a minimum of 300 pupils, or 75 pupils in each age group, and 12 teachers. The subcommittee reports that there are gains in economy and effectiveness until enrollment reaches 700.

Elementary schools should have at least 175 pupils and seven teachers for six grades. Efficiency and effectiveness improves up to 300 pupils and 12 teachers.

School districts, the subcommittee reports, need at least 1,200 young people and 40 teachers. Top limit should be approximately 10,000 pupils for any one district.

Only one in eight school districts in the nation has 40 teachers or more. A district that is too small, the subcommittee says, can offer only a limited curriculum: "The limitations are especially serious in small high schools where the offerings in physics, chemistry, foreign languages and vocational subjects are either lacking or seriously limited."

Role of states: Local educational needs, one group argues, can be known only by the local school board. It alone can respond to the wishes of parents.

Advocates of greater state control say educational

standards will be lowered if school districts are left autonomous. The state, they say, must enforce minimum standards and help impoverished local school districts.

Role of federal government: The controversy over federal aid to education "hinges on questions of whether or not one believes that the federal government can help to pay for schools without in some part controlling them, and whether one thinks that any degree of federal control is dangerous."

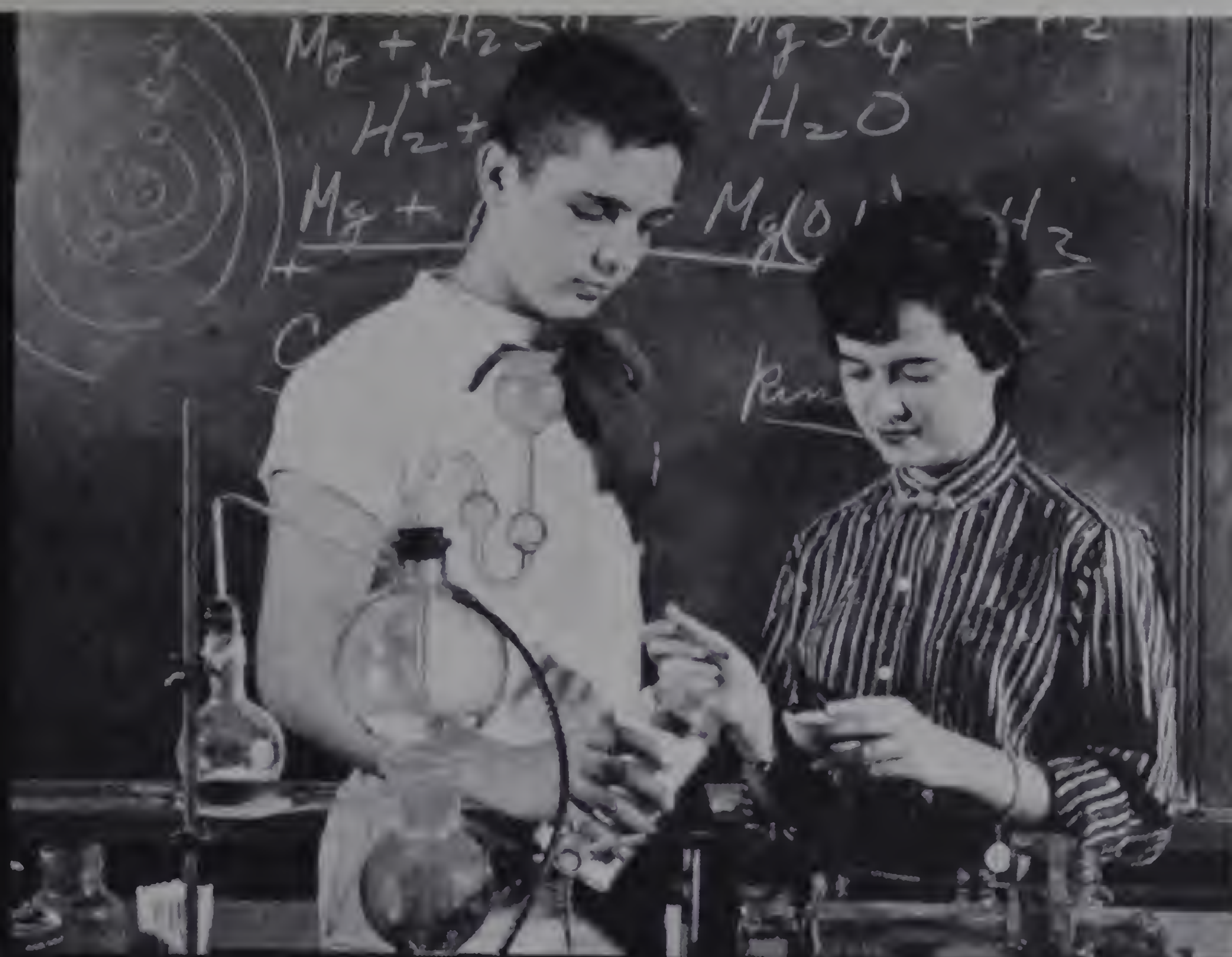
The subcommittee says: "Some feel that the federal government simply should not subsidize any part of a school program. Others feel that it should give money to the states but should keep its hands entirely off the administration of the funds after the states accept them. Some believe it is poor administration to grant money without any control on how it is to be used."

3. What are our school building needs?

Educational construction expenditures will total \$3,000,000,000 this year, compared with \$2,700,000,000 last year, and \$1,500,000,000 in 1950. Almost 200 new classrooms open daily, yet they fail to keep pace with the increasing number of students, the additional rooms needed to replace losses from fire, flood, obsolescence, and the rooms required to reduce overcrowding.

A federally sponsored school survey conducted in 1951 showed a 245,000 classroom shortage. Twenty-

Teacher loss is greatest
in fields of
greatest need—sciences,
mathematics, agriculture



HOME OR SCHOOL? for developing

EMOTIONAL
MATURITY

SOCIAL
ADJUSTMENT

OCCUPATIONAL
SKILLS

CITIZEN
RESPONSIBILITY

seven per cent of existing buildings were rated satisfactory, 40 per cent, fair and 33 per cent unsatisfactory.

New York City conducts classes in four buildings more than 100 years old, and 13 other buildings more than 90. Pennsylvania students still attend 2,200 schools with outdoor toilets.

Many schools are overcrowded while nearby areas have half-filled classrooms due to population shifts.

The subcommittee considering this topic concerns itself with these factors:

Determination of needs: Whose responsibility is this? Is it the job of the board of education and the school administrator? Should teachers be consulted? Should citizens conduct a survey? Should an outside survey team, experienced in such matters, determine a community's building requirements?

Every situation is a separate matter, and the White House Conference may discover that these questions can never be answered nationally. To discuss the issue nationally, however, has value.

For example, the guide says, some surveyors may consider only the current situation, fail to foresee the future. The report continues: "Some will ignore the work of civic planning groups; others will cooperate with those who propose the locations of parks, highways, areas for business or residential development, and other aspects of community planning."

Classroom requirements: Opinions vary regarding what ages and grade ranges should be housed together. The subcommittee says: "Some educational leaders

favor housing children from grades one through 12 in the same building. Others maintain that for sociological, psychological, and educational reasons, children should be brought together in groups with a reduced age or grade range."

Some advocate neighborhood or cottage schools, where young children, perhaps kindergarten through grades two or three, are brought together. Opponents say this deprives children of the advantages of having older associates from whom they can learn.

Planning the building: Who, besides the architect, ought to be consulted? Advocates of one approach expect those who use the building—teachers, pupils, custodians—to take part in the planning. Advice of representative citizens is desirable. Use by adults of school buildings is increasing. The need for and desirability of multipurpose buildings must be considered. Others consider that schools belong to the youth.

4. How can we get enough good teachers—and keep them?

Elementary schools need 165,000 teachers. High schools need 40,000. Total: 205,000.

The subcommittee shows these reasons for the elementary teacher needs: About 60,000 (out of 690,000) quit each year. Bigger enrollments raise the need another 25,000. To relieve overcrowding requires 30,000. An estimated 10,000 are needed to add new subjects and services.

(Continued on page 70)

Russia's coming manpower squeeze

What conclusion is to be drawn from your two-year study of Russia's professional manpower?

During the past 25 years the Soviet Union has made enormous strides toward building up its specialized manpower resources. It is equal to or even slightly superior to the United States in its supply of trained manpower in specialized professional fields. The Soviet effort continues. Our own policies in education and in regard to specialized manpower resources will decide whether within the next decade or so the scales will be tipped off balance.

What are some of the strong points of their system?

Enormous emphasis has been put on teaching science and the fundamentals of science at the secondary school level. Also interesting is the fact that, despite all the ideological interference, despite all the hampering effects, despite many reservations about the quality of their education, they get enough of the fundamentals so that they can pursue the creative kind of career. The grip of indoctrination is not as overwhelming as it appears on the surface. We have been talking about the detrimental effects of political control in Russia for a long time. The fact is, there are undoubtedly detrimental effects, but at the same time it doesn't stop them from developing a creative talent.

What are the most significant recent developments in Russian secondary education?

Of particular significance is the enormous expansion in enrollment in the three upper grades of the Soviet ten-year school—corresponding roughly to our four high school grades. Between 1949, when the pre-war enrollment peak was reached, and 1954, enrollment in these grades increased about 4.5 times. Last year this enrollment was about 5,400,000. At the same time enrollment in the lower seven grades of the ten-year school declined by some 7,000,000. Between 1949 and 1952 enrollment in the four elementary grades declined by about one third, or roughly 8,000,000. In the past two years this enrollment drop has begun to affect the intermediate grade (5-7) enrollment.

Significant, too, are recent changes in the Soviet curriculum which have increased further the instruction time devoted to sciences. Some vocational subjects have been added. In the past, Soviet schools devoted about 40 per cent of instruction time to sciences and mathematics during ten years of study. If we now include vocational subjects, it appears that

Specialist Nicholas DeWitt of Harvard's Russian Research Center (below) has just completed a two-year survey of the Soviet Union's professional manpower for the Office of Scientific Personnel of the National Research Council—National Academy of Sciences. In an interview with editors of Nation's Business, Mr. DeWitt discloses some of his conclusions



this percentage will be almost 50 per cent.

What is the significance of these trends for the future?

The expansion of upper-grade enrollment is part of the drive by Soviet planners to introduce universal and compulsory ten-year education by 1960. The recent expansion has already resulted in graduations this year of about 1,000,000 from the tenth grade. This abundance of secondary-school graduates has made for favorable conditions for selecting entrants into Soviet higher educational institutions and semi-professional training. The drop in elementary school enrollment shows that Russia is beginning to feel the deficit in births and excess deaths among infants which occurred during World War II.

This means that by 1957 the number of 15-year-olds will be considerably smaller, and will continue to be small for three or four years thereafter. Fewer persons will either continue their education or enter the labor force. During the early 1960's this deficit will affect the age groups subject to military draft.

Will Russia have a critical manpower shortage which will handicap her training programs, reduce additions to the labor force and the military draft?

Well, she will have a hard time meeting all three in the early 1960's. As far as upper-grade enrollment in the Soviet ten-year school and university enrollment are concerned, the present levels can be maintained or expanded simply by letting a larger proportion of a given age group attend school. This procedure, however, would reduce new additions to the labor force or force some reduction in draft calls in the armed forces. This might be one of the reasons why the Soviets are most eager to coexist during the next decade.

What can they do to offset their industrial manpower shortage?

They might transfer additional rural labor into industrial occupations. After all, Russia still has a substantial agricultural labor surplus and rural overpopulation. Of course, increasing industrial labor and the urban population depends also on solution of the Soviet agricultural problem.

Furthermore, as Soviet planners have already indicated, they will try to push automation in industry and undertake technological reconstruction. These measures, of course, depend to a large extent upon the continuing high rate of investment in

(Continued on page 101)



SOVIETS are producing tremendous number of scientists and engineers now. Typical of crop is group of electrical engineering students shown at work in a Moscow classroom

OUTLOOK for continued high production of technicians is clouded by fact that Russian birth rate was low during war. Result: A sparse crop of early school agers now

SOV FOTO

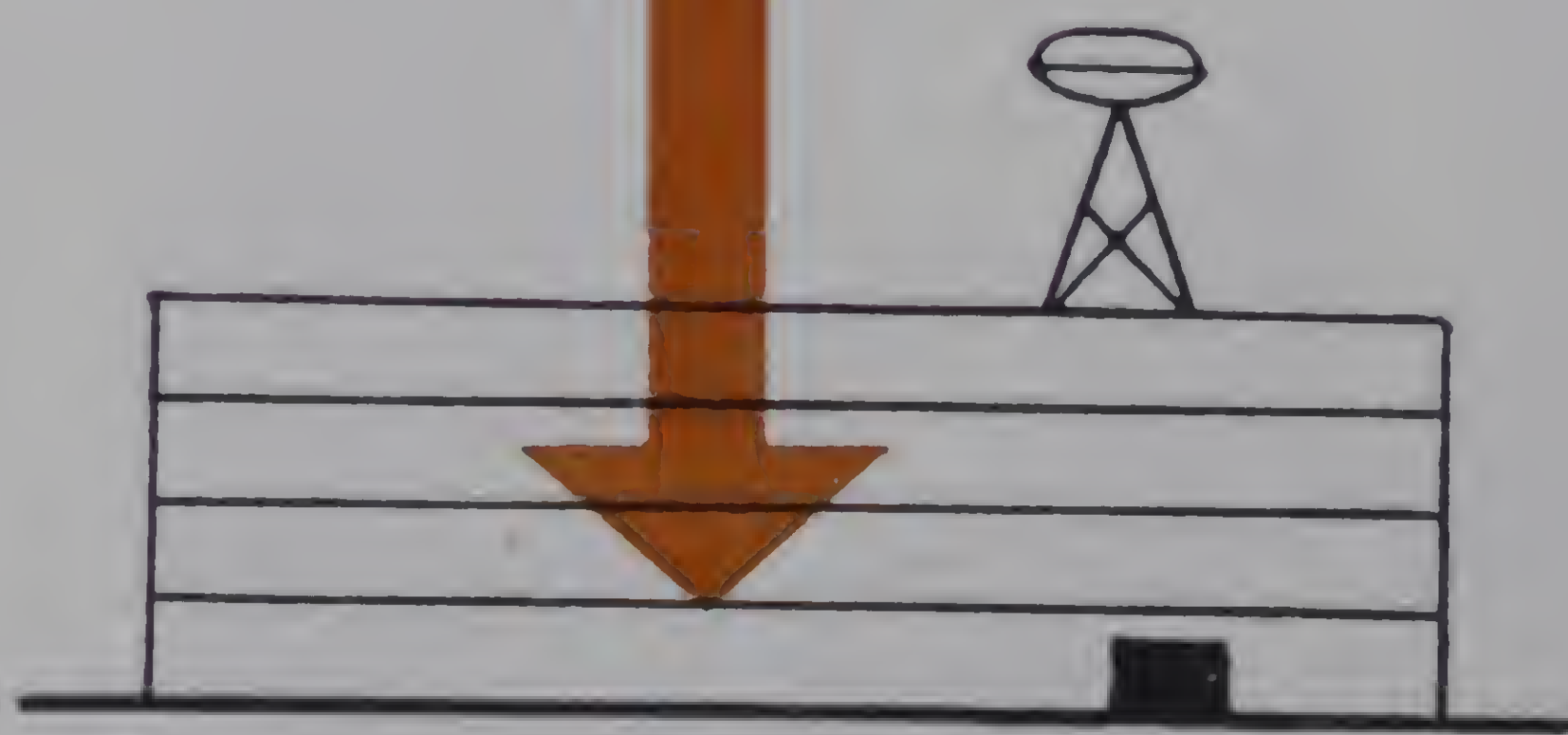




The sun's power is going to work



Solar furnace concentrates high heat in small area at its focus



High temperature furnaces, a solar battery and solar cookers already use the sun's rays as a source of power. Here's what business and science are doing to harness this energy for the needs of the future

BUSINESSMEN, scientists and engineers are teaming up to tap the world's only source of unlimited energy for power and heat.

Their objective: the sun.

The potentialities of solar energy, which one scientific expert says "make the atom look insignificant," will be explored and outlined this month at Phoenix, Ariz., where the first World Symposium on Applied Solar Energy is taking place.

Harnessing the sun's power is fast becoming an economic necessity. Scientists point to the huge bites being taken out of our reserves of ordinary fuel by heavily industrialized nations. Surging population growth will triple the number of people in the world by the year 2050 and the demand for more and more energy could set the stage for a world-wide and lethal scramble for productive power.

Dr. C. C. Furnas, chancellor of the University of Buffalo and former director of the Cornell Aeronautical Laboratory, warns that "explosive population growth and increasing industrialization can result in destructive global war unless answers to the energy problem are found. Nations have fought for food and they will fight for energy."

Productive solar energy is beyond the dreambook stage. Scientists and hardheaded business firms all over the world now are working to develop its known capabilities into more practical and economical channels. Present working developments beyond the first experimental stage include a solar battery, a solar furnace that melts steel like butter, and solar cookers that are selling at the rate of 1,000 a month in India.

Dr. Farrington Daniels, of the University of Wisconsin, has this to say about the global concern over the future of our power and energy resources:

"The world's consumption of food amounts to 2,500 kilocalories per person per day but its consumption of fuel is equivalent to 25,000 kilocalories per person per day. (One kilocalorie is the heat given off by burning one half gram of wood.)

"In other words the world feeds its machines and heating units ten times as much as it feeds itself. In the United States the people feed themselves slightly more in calories than the world average, but we feed our machines 50 times as much as we feed ourselves. The industrialized nations with heavy energy demands for manufacturing, transportation, house heating and cooling are possible only because they are drawing on the accumulated products of photosynthesis of long ago—they are
(Continued on page 74)

Solar Energy

may reshape world

Power from the sun's heat will help develop those areas which now have little conventional energy resources and few facilities for transportation

Stanford Research Institute, Menlo Park, Calif., has been in the forefront of solar energy research for several years. Dr. Jesse Hobson, whose analysis of the economic problems of solar energy appears here, headed a team of Institute and other experts who collected economic data during a four-year period from all parts of the world. This analysis—the first of its kind—has been made available to **NATION'S BUSINESS** by special arrangement in advance of its presentation at the first World Symposium on Applied Solar Energy at Phoenix, Nov. 2.

THE economics of solar energy are usually the economics of devices with a high initial cost and low operating charge. Since no fuels are burned, the operating charges for a solar device can be negligible, or at least considerably lower than for a fuel burning device. This advantage offsets the higher initial investment required for most solar installations and the higher annual fixed charges.

Solar energy differs from conventional fuel resources. Probably the most important difference is that solar energy is intermittently available everywhere on the surface of the earth. Every nation, every city, every house roof collects energy part of the time—although the distribution of this wealth is far from perfect. No fuel need be burned to operate a solar pump or a solar cooker. No fuel must be brought from a city to a small isolated farm to operate a solar hot-water installation.

Solar energy is found where we need it, where we consume it—from the roof of the home to the heater in the home, from the roof of the shop to the small

lathe. No mines, railroads, high tension lines, wholesalers, packers, or distributors are needed.

More important still, where no transportation is available, nor transmission lines to bring the fuels required by a small community, using the sun's energy can prove the difference between living in the Nineteenth Century and living in the Twentieth.

A solar pump has a higher initial cost than a gasoline pump or an electric pump. A solar water heater is also more expensive than a conventional heater, but once it is installed, it costs nearly nothing to use. If it lasts long enough, there is little doubt that the solar pump or water heater can be more economical to use than a fuel pump or a conventional water heater.

The principal economic factors that affect the comparative cost of solar devices with the cost of equivalent conventional units are:

1. The costs of conventional energy resources: fuels, electricity, hydropower, animal, and human power.
2. The availability, intensity, and distribution of solar energy.
3. Interest rates and taxes.
4. The cost of a solar device, its expected life, and its corresponding rate of depreciation.
5. The use factor of the solar and conventional device.
6. The efficiencies of the solar and conventional processes under comparison.

These factors will vary—may vary widely—from one point to another; and before conclusions can be reached about the economics of solar energy, particular applications must be examined in particular locations.

Stanford Research Institute wanted to know what target prices would make solar devices economical. We therefore conducted a study of the economics of solar energy. For this study we selected a few applications already developed—like solar water heating, space heating, cookers, pumps, and water-distilling equipment. To obtain more valid conclusions, we decided to examine how these applications would fit in the economic framework of various countries around the world. We selected 19 cities in 19 countries where we felt some solar energy application would probably find a ready market. We chose the cities of Phoenix, Dakar, Jerusalem, Sydney, New Delhi, Rome, and 13 others.

(Continued on page 62)

HOW'S BUSINESS? today's

An authoritative report by the staff of The Chamber of Commerce of the United States

AGRICULTURE

Top U. S. Department of Agriculture price and commodity economists seem confident that a bottom has been reached on farm prices.

Major upsetting factor this summer and fall has been the output of products considerably above what had been expected. Record or near record production and huge surplus stocks will keep prices depressed below last year's level on many commodities. Heavy marketings have delayed the seasonal rise in beef prices and will hold hog prices at or near current levels into 1956.

Depending on final crop estimates, corn prices will continue lower than a year ago. The heavy production of most feed grains has put their prices substantially lower than last year with seasonal low points apparently reached.

Dairy prices are running above 1954. Most poultry products and commercial vegetable prices are above last year although some are near their seasonal lows.

Larger exports, growing population, high employment and greater consumption of protein foods plus high yields should indicate passage of the low point in farm income and a possible rise in the last quarter of this year over 1954.

CONSTRUCTION

In the year ending July, 1955, the Commerce Department's composite construction cost index rose three per cent, most of this increase occurring in the past five months. Further increase can be expected due to rising material costs and to higher wage costs which already have appeared in wage agreements.

That the price of construction has not risen correspondingly is evidence of good management and volume operation at smaller profit

margins. Despite rising costs, however, construction expenditures, which have increased every year since World War II, are expected to go still higher this year and again in 1956, even in the face of a possible small decline in number of homes started next year.

CREDIT & FINANCE

The credit squeeze is not over. Further efforts to tighten up on the boom were postponed by the President's illness and the stock market drop. Nobody, least of all the Federal Reserve, wants a break in the confident expectation of economic progress. But a conviction remains that this progress requires a firm foundation if excesses are to be avoided.

Restrictive pressures from higher interest rates have tended to raise lending standards and cause more careful scrutiny of loans, particularly of marginal requests. This was the objective of the squeeze.

While stock prices dropped and government bond prices rose, the Federal Reserve watched carefully but found it unnecessary to take action. This does not mean a lessening of pressure or even an end to the tightening process. It is more in the nature of a moratorium.

DISTRIBUTION

The retail boom has been going on steadily for 12 months. From November, 1954, through September, 1955, for example, retail sales exceeded those of the corresponding month a year earlier. Preliminary estimates for September indicate sales will equal the total of \$15,400,000,000 reached in August and will approximate a nine per cent gain over sales in September, 1954. Total gain in retail sales for the first nine months of this year is estimated at

eight per cent. Department store sales through September 24 were seven per cent higher than for the corresponding period of 1954. Retail merchants, anticipating peak sales during Christmas, are being urged to buy early and cut off purchases no later than Dec. 10.

The Commerce Department reports that this year consumers have been spending 94 cents out of every dollar of disposable personal income, whereas in the first half of last year they spent 92 cents out of every dollar. A two per cent increase in the proportion of the income spent means the addition of more than \$5,000,000,000 to the demand for goods and services.

FOREIGN TRADE

High rates of industrial production in western Europe and much of the rest of the world stimulated exports from the United States in the first half of this year.

While U. S. imports kept pace with the increase in exports, the export surplus—as usual—was more than paid for by military and other foreign-aid expenditures, by a high level of travel expenditures abroad, and rising private and public capital flow. These transactions again permitted foreign countries to increase their gold and dollar reserves.

Assuming continued prosperity in the United States, U. S. traders can look forward to continued satisfactory levels of foreign trade, aided perhaps by further liberalization of restrictions against imports of U. S. goods into many countries.

Particularly hopeful, from the point of view of foreign dollar earnings, was the high rate of expenditures for foreign travel which may for the first time reach an annual level of \$1,500,000,000.

Last year U. S. travel expenditures accounted for seven per cent of total foreign dollar earnings through the sale of goods and services to the United States. For Europe alone, this figure was ten per cent. Travel expenditures by foreigners visiting the United States last year approximated \$600,000,000.

GOVERNMENT SPENDING

Government-supported flood insurance is in the offing.

outlook

Flood disasters in the East have brought renewed attention to remedial and preventive measures. There is talk of a \$1,500,000,000 federal flood insurance program under Small Business Administration. A Senate Banking and Currency subcommittee is holding hearings on proposals for federal disaster insurance.

Whatever plan is accepted, the program is likely to leave Uncle Sam picking up the tab for a major part of the cost.

There are new proposals for flood control, particularly for dams controlling the headwaters of tributary streams.

The Hoover Commission is also dragged in. A House subcommittee is holding hearings in flood areas, asking witnesses whether the Commission proposals on water resources and power would help control floods. Since the Commission dealt only incidentally with flood control these hearings are more a veiled attack on its proposals in the field of public power than a genuine quest for information.

LABOR

Starting Dec. 5, the AFL-CIO labor chieftains will be busy getting the new big labor organization rolling. Both George Meany and William F. Schnitzler, AFL leaders who will become the two top men in the new organization, have said increased political power is a number one objective.

The vehicle will be named the Committee on Political Education, and will be formed from the CIO's Political Action Committee and the AFL's Labor's League for Political Education.

The big union's objective will be to add political power at the local precinct level to its existing lobbying techniques—making it extremely difficult for legislators to say no.

Both Mr. Meany and Mr. Schnitzler disavow any intention to create a labor party.

NATURAL RESOURCES

All producers of raw materials which enter into interstate commerce have a stake in the fate, in the next session of Congress, of the Harris bill to amend the Natural Gas Act. Unless the bill is passed,

a precedent has been established for federal regulation of the competitive, non-monopolistic production of any raw material which eventually enters into interstate commerce.

The 1938 Natural Gas Act authorizing the Federal Power Commission to regulate interstate transmission of natural gas by pipeline companies specified that the law was not to apply "to the production and gathering of natural gas." But in the Phillips Petroleum Co. case in 1954, the Supreme Court ruled that the Act does authorize the FPC to regulate prices of the thousands of independent gas producers and gatherers in sales to the pipeline companies.

Since large quantities of gas are produced with crude oil, the cost of producing the oil must also be figured, ultimately requiring the FPC to fix the price of crude oil. The ultimate result will be higher prices for oil and gas and less gas sold to pipelines.

The only assurance for a continued supply of oil and gas is the economic freedom to search for and develop new underground reserves, under our traditional system of competitive enterprise, based on the natural law of supply and demand.

TAXATION

Problem areas in the administration of the excise taxes are under severe scrutiny. During the past month a ways and means subcommittee on excises has heard many days of testimony on the administrative shortcomings under the law and business problems of compliance.

The Treasury, which originally had few suggestions of its own for improvement, has been directed to work with the committee staff in

developing proposals for beneficial changes in the excise tax structure.

Business criticism has been leveled strongly at the unduly burdensome reporting requirements and methods of payment and questionable inclusions of marginal products which have been imposed. Present hearings are designed to ferret out these instances and devise better systems which can be proposed to the Congress at the coming session. Although rates as such are not involved, there may be minor revenue postponements or losses because of changed reporting or payment dates or small losses may result from removal of tax from items which Congress had not intended to be taxed.

TRANSPORTATION

Coastwise and intercoastal shipping are contemplating a brighter future with a new technique known as "sea-trailer" service. It involves hauling loaded truck trailers from port to port via ship.

The new system would greatly reduce cargo handling and cut costs to a point where ship lines can once again compete for long-haul traffic. It will also lessen operators' need to rely on longshoremen.

Doors in the sides of the specially designed ship and ramps at the stern allow trailers to be towed on board and off.

Privately owned lines have already announced plans for at least 15 vessels. The largest of these will carry 570 loaded trailers, have a range of 16,700 miles, and cost about \$11,500,000.

A few trailer-ship routes are now in operation. The proposed new service will link Hawaii and the mainland, Seattle and Alaska, and increase sailings between Puerto Rico and the Gulf Coast and eastern seaboard ports.



RICHARD STEINHEIMER

proposal: A BILLION MORE FOR SOCIAL SECURITY

A clash is brewing in the Senate over a plan that has passed the House and which some critics feel will jeopardize the 20-year-old program

A FIGHT is shaping up for the next session of Congress over social security legislation which would:

- ▶ Boost social security taxes 25 per cent, or about \$1,300,000,000 a year.
- ▶ Increase benefit payments a minimum of \$600,000,000 and possibly as much as \$2,000,000,000 the first year.

That would be the impact of social security amendments which have passed the House and on which the fight will center in the Senate. Part of a bill, H. R. 7225, introduced by Rep. Jere Cooper of Tennessee, chairman of the House Ways and Means Committee, the amendments would:



Introduce a new benefit: provide monthly payments to totally and permanently disabled persons 50 years or older.



Begin payment of retirement and survivor benefits to women at age 62 instead of 65.



Continue children's benefits beyond age 18 for those who are permanently disabled.



Extend benefits and tax collections to all self-employed professional groups with the exception of physicians.

The Cooper bill also would raise the tax rate on wages up to \$4,200 a year from four to five per cent, shared equally by employers and workers, and from three to 3¾ per cent for the self-employed. The rate would increase every five years until 1975, when it would reach nine per cent shared by employers and workers and 6¾ per cent for the self-employed. Supporting the measure at hearings which the Senate Finance Committee will hold early next year will be:

Organized labor—The American Federation of Labor, which will merge with the Congress of Indus-

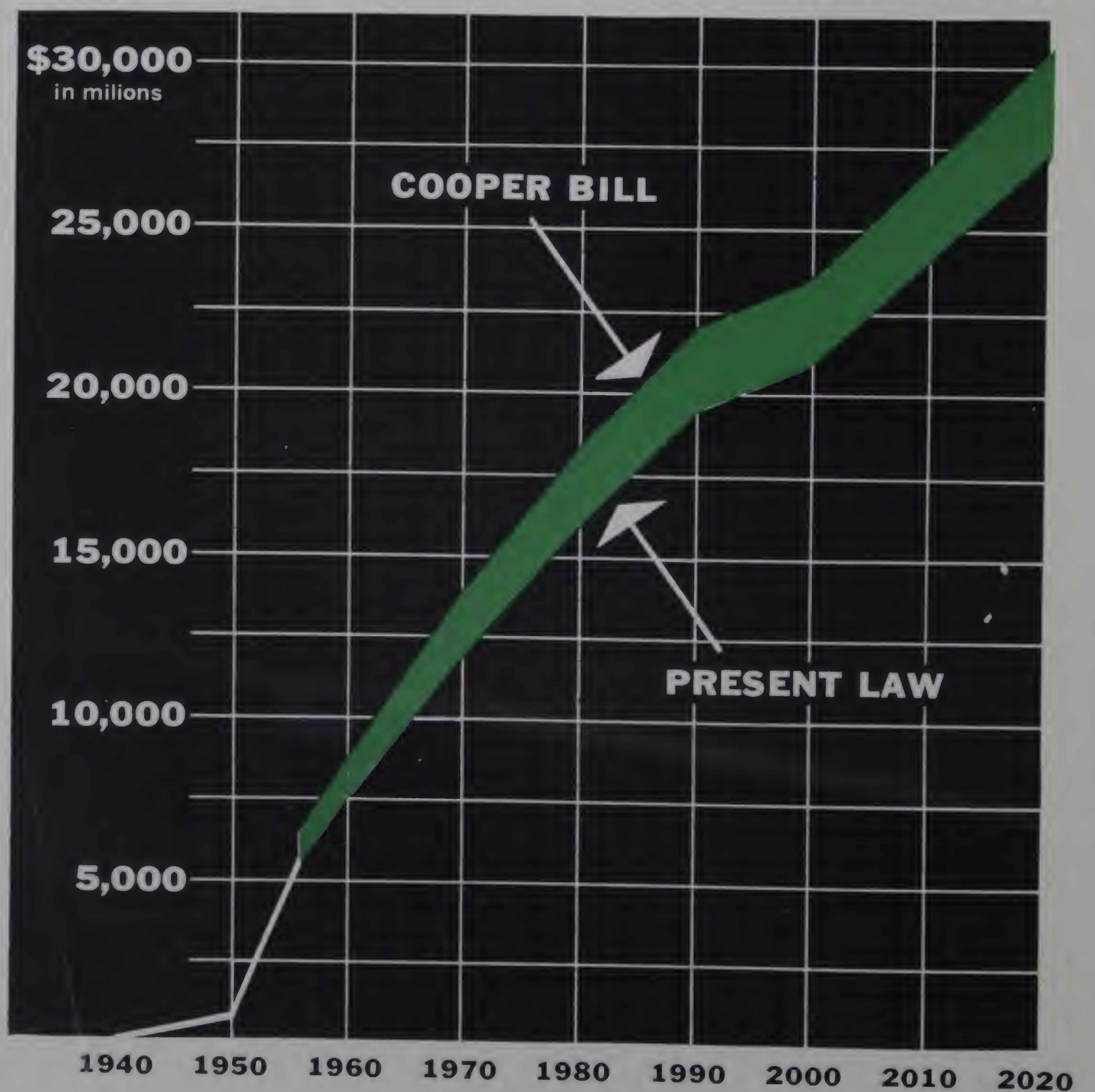
trial Organizations next month, has already heralded the Cooper bill as the first major test of strength of the new 15,000,000 member labor organization.

Democratic leaders—They feel a special responsibility for expanding government social security, which began as a New Deal measure in 1935. They hurried the Cooper bill through the House without hearings.

Relief groups—Public and private relief organizations seeking to cut their costs for aid to the disabled will likely support the disability amendment.

Women's organizations—They

ESTIMATED COST OF BENEFIT PAYMENTS



have for years sought earlier retirement benefits for women workers and will in all likelihood support benefits at 62 for women.

Opposing major features of the Cooper bill will be medical, insurance, business and other groups which are against increasing government benefits in competition with private systems and against increasing social security taxes which do not yet cover the ever increasing contingent and partially accrued liability of social security.

Social Security Administration actuaries estimate that the accrued liability up to a year ago reached \$280,000,000,000.

This is the amount of money the government would need to pay off present social security commitments if the system were terminated and the promised benefits were paid off when they fell due.

The trust fund, however, contains only \$21,000,000,000. Government actuaries estimate that, under present tax collection schedules, the fund will rise to \$146,087,000,000 by the year 2000 and to \$497,053,000,000 by 2050, assuming demand on the fund is low. If the demand is intermediate, they guess the fund will rise to \$62,910,000,000 in 1990, then shrink and be exhausted in 2027. If it is high, the fund will be exhausted in 1995.

The issue in Congress apparently will be not so much whether to amend the Social Security Act this time, but how to do it and how much. Both Democrats and Republicans seem to agree that social security standards should be improved.

The Cooper bill—which swept through the House by a 372-31 vote—shows the direction Democratic leaders feel these improvements should take.

Republican interest centers on changes which President Eisenhower has already asked.

He has asked for coverage for 2,900,000 military and 2,500,000 federal civilian employees not now included in social security. Full contributory coverage of members of the armed forces is included in a bill for reshuffling the military's five separate survivor benefit programs which also passed the House last July. Since 1940, some 20,000,000 persons serving in the armed forces have received, without cost to them, a social security wage credit of \$160 a month while in service.

The President has also suggested that reports on employee earnings should be made annually instead of quarterly and a bill pending in the House would carry out this recommendation. A single report, timed to coincide with income tax returns,

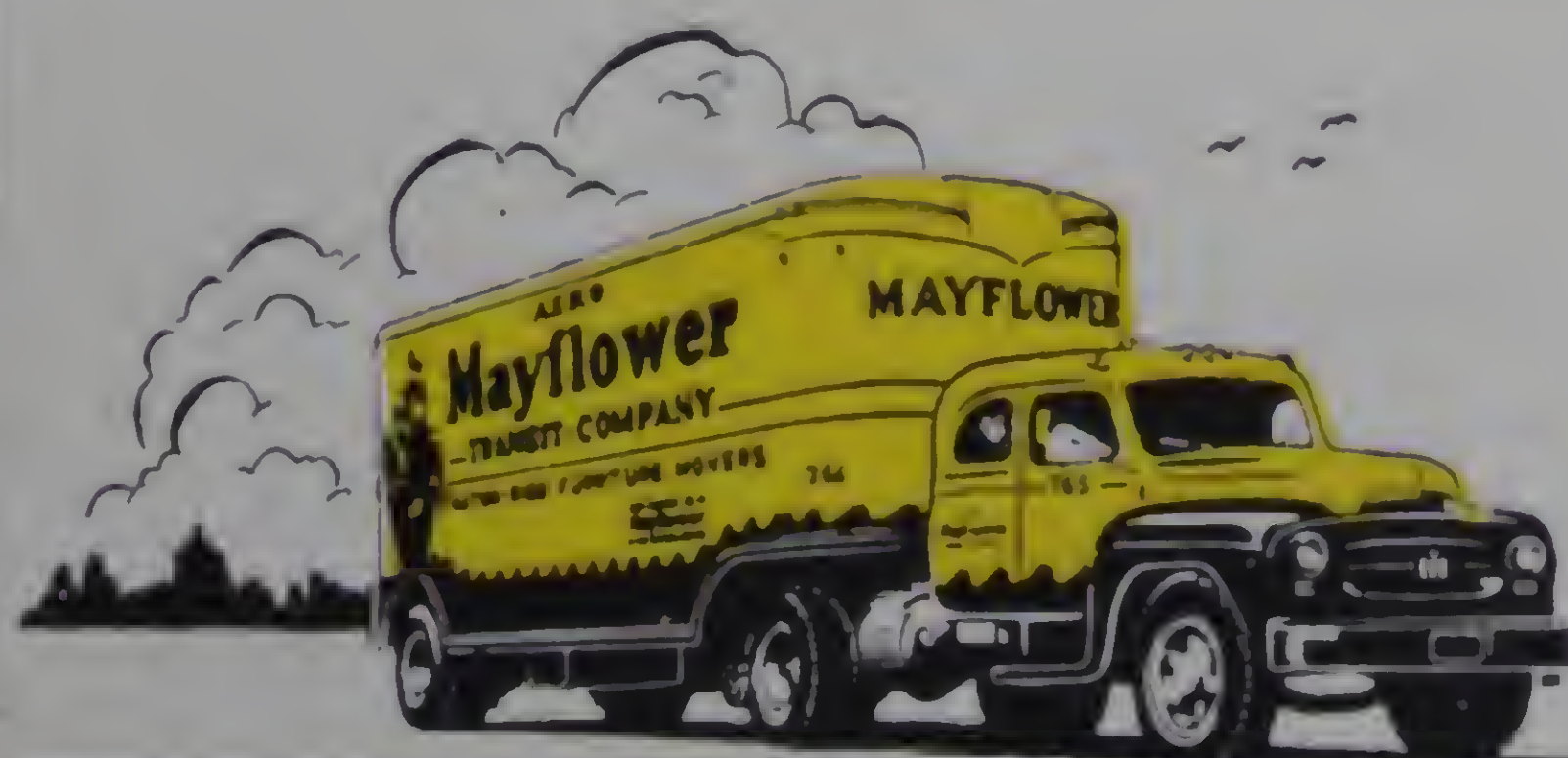
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SOCIAL SECURITY
continued

would relieve employers of a considerable statistical burden.
Like the President, Secretary of Health, Education and Welfare Marion B. Folsom would extend social security benefits to federal civilian employees. He would also cover all self-employed professional groups, including physicians. Physicians would be the only professionals uncovered by the Cooper bill.

"Social legislation," the Secretary has said, "must change with changing social and economic conditions."
The main part of the program commonly referred to as social security is Old Age and Survivors Insurance. Other aspects of the program are the federal-state unemployment insurance system, financed largely by employer contributions and administered by the states, and public assistance for needy aged, blind and disabled and for dependent children and widows. The public assistance program is a federal-state partnership in which federal grants-in-aid match state expenditures.

Temporary disability benefits, workmen's compensation covering job-connected disability, and industrial safety laws are all state programs, but there are signs of increasing federal interest in them, too.
This has happened to Old Age and Survivors Insurance in 20 years:
Coverage has increased from 33,000,000 to 70,000,000. Self-employed were added in 1951; farm workers and some professional groups, last year. Today nine out of ten individuals are covered.
The tax rate on employer and worker has risen from one per cent each on earnings up to \$3,000 a year to two per cent each on income up to \$4,200. Increases in steps of one

half per cent are scheduled in 1960, 1965, 1970, and 1975, when the rate is supposed to level off at four per cent each, or eight per cent for worker and employer combined. The rate for the self-employed, now three per cent, is due to rise to 3¾ in 1960, 4½ per cent in 1965, 5¼ per cent in 1970, and six per cent in 1975.
► Tax collections increased from \$530,000,000 in 1939 to \$5,080,000,000 last year. The Cooper bill would increase this to about \$6,400,000,000 next year.
► The number of persons receiving monthly Old-Age and Survivors Insurance has gone from 963,000 in December, 1944, to 7,643,000 last July.
► The benefit payments, which totaled \$35,354,000 in 1940, came to \$4,333,147,000 last year. The average check is \$61.21 compared with \$22.60 in 1940. Anticipated benefit costs for next year are \$5,855,000,000. The Cooper bill would raise this to \$6,446,000,000 or \$7,855,000,000 depending on whose estimates prove accurate.
► Since 1940, when monthly payments began, the minimum benefit for a single worker has risen from \$10 to \$30 and the maximum from \$25 to \$108.50. For a married couple, the maximum is now \$162.50; for a family when benefits for dependents are included, \$200.
The Cooper bill's supporters feel that its proposals are necessary to fill serious gaps in the social security program. Republicans on the Ways and Means Committee, in their own report, recognize that all the bill's proposals are undoubtedly politically attractive and that several of its provisions have great merit.
They warn, however, that the bill would have unpredictable and far-reaching impact, not only on OASI but also on private pension plans to which 12,000,000 workers look for

TREND OF SOCIAL SECURITY TAXES
(per cent of wages up to \$4,200 a year)

Year	Present Law			Cooper Bill		
	Employer	Worker	Self-employed	Employer	Worker	Self-employed
1955	2	2	3	2	2	3
1956-59	2	2	3	2½	2½	3¾
1960-64	2½	2½	3¾	3	3	4½
1965-69	3	3	4½	3½	3½	5½
1970-74	3½	3½	5¼	4	4	6
1975 and after	4	4	6	4½	4½	6¾

Can you use the power of pictures...



1. to keep orders flowing in?

"Wrap our plant in a package so we can carry it along on sales calls."

With these instructions to his movie producer, General Manager Jack Kleinoder last year ordered a 20-minute 16mm, color film for Volkert Stampings, Inc., of Queens Village, N. Y.

The film, which explains Volkert's electronic parts manufacturing services to development engineers, has already paid big dividends for its sponsor. "We credit the film," says Kleinoder, "with a lot of unsolicited orders that have kept our production at a very satisfactory level."

Pageant projector preferred. "When I show our film," Kleinoder continues, "I prefer to use our Kodascope Pageant Sound Projector because it delivers crisp pictures and comfortable sound, yet is light and easy to handle."

Pageants, permanently pre-lubricated, completely bypass the common trouble spot of improper oiling, most frequent cause of projector breakdowns and repair bills. Fidelity Controls permit you to hear optimum sound from any optical track; built-in field-sharpening elements sharpen your pictures over the whole screen. Super-40 Shutters throw 40% brighter sound-speed movies—yet let you project silent-speed films with the same machine. Check coupon for more information.



2. to increase sales force enthusiasm?

"It isn't what you tell a man, but what he comprehends that is important," writes Ned F. Foulds, Regional Manager of the Chrysler Airtemp Sales Corporation, of Dayton, Ohio. "That's why we train our sales force through as many senses as possible with the aid of strip films, slides, and our Kodaslide Signet 500 Projector. The projector's ability to skip or repeat a picture helps us adjust presentations to individual audiences. Its light is powerful enough to assure sharp, clear pictures even in hard-to-darken rooms."

"But the real pay-off is that our audio-visual presentations are exciting interest and boosting attendance at our sales meetings—and increasing sales!"



3. to train product users?

"Maintenance of a Bliss press includes a lot of important but easy-to-forget details. Our problem was to make these points easy to remember," writes J. T. Harrington, Advertising Manager of the E. W. Bliss Company, of Canton, Ohio.

Bliss's solution was a 25-minute sound and color movie, "Power Press Maintenance," produced by Farrell & Gage, of New York, and filmed with a Cine-Kodak Special 8 Camera.

"Because it dramatized details, customers remember and follow our recommended maintenance procedure," says Mr. Harrington. "It was made as a service to our customers. Because they received it enthusiastically, we plan to make additional movies each year."

THIS BOOKLET CAN HELP YOU DECIDE

This fast-packed booklet, "Motion Pictures: Aids in Business and Education," can help you decide how films can help you increase your sales volume without increasing your overhead. It discusses applications, planning, production costs, presentations, and effectiveness of business and industrial films. Suggests further references and other sources of loan films. Just mail the coupon for your complimentary copy.



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SOCIAL SECURITY

continued

their security; on private insurance, and on the public assistance program.

Ultimate costs, committee Republicans say, might eventually weaken or even destroy public acceptance of the social security system.

"We are creating a scale of benefits which must be supported by a social security tax which, in the not too distant future, will be equal to and in many cases higher than the federal income tax," they say.

They cite the example of a farmer with a net income from self-employment of \$4,200 in 1975. If he has a wife and two children and takes the standard deduction, his federal income tax, under present rates, will be \$276; his social security tax will be \$283.50. The social security tax would be more than 20 per cent of net taxable income. They conclude:

"We believe that realism requires us to face the cold fact that these projected tax burdens are so high as effectively to preclude any significant social security liberalizations in the future."

The Chamber of Commerce of the United States favors putting the social security program on a pay-as-you-go basis and making coverage universal so that as much of the population as practical would receive benefits.

Some critics of the Cooper bill believe the ultimate goal of some of its supporters may be the "Minimum Standards for Social Security" convention adopted by the International Labor Organization three years ago with the support of the government and labor delegates from the United States.

The employer delegate voted against the convention.

The ILO program includes old-age and survivor benefits at a level higher than we now have, disability benefits such as those included in the House bill, weekly benefits for unemployment for any reason, benefits for maternity leave, monthly payments for each dependent child, lump-sum job separation pay, compulsory health insurance.

Estimates are that such a program in this country would cost a minimum of 30 per cent and a possible 40 per cent of payroll.

Some South American countries with much of the ILO program have tax rates that run as high as 25 per cent.

The rate is 35 per cent for much of France's payroll.

Here is what the main provisions

Now Puerto Rico Offers 100% Tax Exemption to New Industry

by BEARDSLEY RUMI

"We don't want runaway industries" says Governor Muñoz. "But we do seek new and expanding industries." Federal taxes do not apply in Puerto Rico, and the Commonwealth also offers full exemption from local taxes. That is why 317 new plants have been located in Puerto Rico, protected by all the guarantees of the U.S. Constitution.



Beardsley Ruml

IN A dramatic bid to raise the standard of living in Puerto Rico, the Commonwealth Government is now offering U. S. manufacturers such overwhelming incentives that more than three hundred new factories have already been established in this sunny island 961 miles off the Florida coast.

First and most compelling incentive is the 100% tax exemption for most manufacturers who set up new plants in Puerto Rico.

For example, if your company is now making a net profit after taxes of \$53,500, your net profit in Puerto Rico would be \$100,000—a gain of 87 per cent, simply because Federal corporate income taxes do not apply in Puerto Rico and all local taxes are waived as well.

Your dividends in Puerto Rico from a corporation there could be \$50,000 against \$25,000 net in the U. S.—because Federal personal income taxes do not apply either.

What About Labor?

Puerto Rico's labor reservoir of 650,000 men and women has developed remarkable levels of productivity and efficiency—thanks, in part, to the Commonwealth's vocational training schools. These schools also offer special courses for managers and supervisors.

The progress made in technical skills may be gauged from the fact that there are now twenty-eight factories producing delicate electronic equipment.

Among the U.S. companies that have already set up manufacturing operations in Puerto Rico are Sylvania Electric, Carborundum Company, St. Regis Paper, Remington Rand, Univis Lens, Shoe Cor-

CORPORATE TAX EXEMPTION

If your net profit after U. S. Corporate Income Tax is:	Your net profit in Puerto Rico would be:
\$ 17,500	\$ 25,000
29,500	50,000
53,500	100,000
245,500	500,000
485,500	1,000,000

DIVIDEND TAX EXEMPTION

If your income* after U. S. Individual Income Tax is:	Your net income in Puerto Rico would be:
\$ 3,900	\$ 5,000
7,360	10,000
10,270	15,000
14,850	25,000
23,180	50,000
32,680	100,000
43,180	200,000
70,180	500,000

*These examples are figured for dividends paid in Puerto Rico to a single resident. Based on Federal rates effective Jan. 1, 1954.

poration of America, and Weston Electric.

"Close to Paradise"

Listen to what L. H. Christensen, Vice President of St. Regis Paper, says:

"The climate is probably as close to paradise as man will ever see. I find Puerto Ricans in general extremely friendly, courteous and cooperative."

"This plant in Puerto Rico is one of our most efficient operations, in both quality and output. Our labor has responded well to all situations."

Mr. Christensen might have added that the temperature usually stays in the balmy 70's twelve months a year.

The swimming, sailing and fishing are out of this world. Your wife will rejoice to hear that domestic help is abundant.

The Commonwealth will leave no stone unturned to help you get started. It will build a factory for you. It will help you secure long-term financing. It will even

screen job applicants for you—and then train them to operate your machines.

Transportation

Six steamship companies and four airlines operate regular services between Puerto Rico and the mainland. San Juan is just 5½ hours by air from New York.

Light-weight articles such as radar components come off the line in Puerto Rico one day and are delivered by air freight next day in Los Angeles, Chicago and other mainland cities. And, of course, there is no duty of any kind on trade with the mainland.

Are You Eligible?

Says Governor Muñoz: *Our drive is for new capital. Our slogan is not "move something old to Puerto Rico," but "start something new in Puerto Rico" or "expand in Puerto Rico."*

To get all the facts, and to find out whether you and your company would be eligible for complete tax exemption, telephone our nearest office.

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Economic Development Administration
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SOCIAL SECURITY

continued

of the bill proposed by Rep. Cooper would do:

Disability benefits

Monthly payments would be made to workers 50 or older who are totally and permanently disabled.

During the first year of operation an estimated 250,000 disabled workers would receive \$200,000,000; 25 years later, 1,000,000 disabled workers would be receiving \$850,000,000 a year. By the year 2020, the cost would be \$1,044,000,000 by House committee majority estimates.

Republican committee members feel that these costs are at least conjectural. They also want to know about possible interference with the rehabilitation program. Rep. Noah M. Mason of Illinois warns that there are dangerous risks in disability insurance, that private companies lost hundreds of millions of dollars during the depression.

Mrs. Oveta Culp Hobby, before she resigned as Secretary of Health, Education and Welfare, also raised questions about actuarial problems involved in cash disability benefits and about the program's relationship to disability benefits under workmen's compensation, to unemployment insurance, to state temporary disability programs and to private disability and voluntary health insurance plans.

In 1949 disability benefits passed by the House were rejected by the Senate. Instead, Congress established a federal-state program of disability assistance for the needy. Forty-three states and the federal government spent \$145,000,000 for such assistance last year. Four states provide temporary disability insurance in connection with unemployment insurance.

A step toward permanent disability benefits was taken last year when Congress provided for a freeze of social security credits earned by a worker who becomes disabled before the retirement age of 65. The effect is to prevent any deterioration of earned benefits during the years before 65 when the disabled individual is not working.

Forty-five countries have a national program of benefits for permanently disabled persons, according to a survey by the Research and Statistics Division of the Social Security Administration. The survey shows:

► Usually the benefit is on an insurance basis, paid as a matter of right rather than need. In only seven

countries does payment depend on a test of the disabled person's income.

► In 25 countries, the worker, employer and government all contribute toward the cost. In seven, it is assumed by the employer and worker. In six, the employer pays the full cost, the employer in some of them being a socialized government.

Earlier benefits for women

Monthly payments would begin at 62, instead of 65, for women workers who retire, for wives of retired workers, and for widows.

During the first year, the House committee majority figures, about \$400,000,000 in benefits would be paid to an estimated 800,000 additional women, while another 400,000 who are working could receive benefits when they or their husbands retire. After 25 years, 1,800,000 additional women would be receiving about \$1,300,000,000 a year. By 2020, the cost would be \$1,840,000,000. The reduction of qualifying age for widows alone would add \$15,000,000,000 in the value of survivor protection of insured workers next year, the committee majority found.

Basic reason given for the age reduction is that wives generally are a few years younger than their husbands. This makes it difficult for a man to retire at 65, because his wife won't draw benefits for several years. It can make a difference of \$54 a month, and more if there are dependent children. Maximum retirement benefit for a single worker is \$108.50 a month; for a retired couple aged 65, \$162.50. Average retirement age of 69 for a man is cited as evidence of age differential between husbands and wives and reluctance of a man to retire until his wife is 65, too, and can collect benefits.

A survey by the chief actuary of the Social Security Administration disclosed, however, that, of the men claiming benefits at 65, one fifth had wives 65 or older and half had wives younger than 62. So reducing the benefit age for women to 62 would not help seven out of ten couples.

The committee majority estimates that the reduction would aid these groups of women 62 and under 65:

400,000 wives of retired workers.

175,000 widows and mothers of deceased workers.

650,000 working women.

In 1949 the House committee rejected a similar age reduction as too costly.

Republican committee members feel the question should be given more serious study to prevent any discrimination and avoid any detriment to other objectives of social importance, such as creating a favor-

able climate for the employment of older workers.

"Private industrial pension plans are generally geared to the social security system," the Republicans add. "This fact has led most such plans to adopt age 65 as the compulsory retirement age for both men and women. If age 62 is established for social security purposes, it must be expected that the same pattern will be adopted by private industry."

Mrs. Hobby put a series of questions to the committee:

Is a reduction in age inconsistent with, 1, the lengthening life span for the entire population, or, 2, the fact that women live longer than men on the average?

Would a reduction in age for working women make it more difficult for them to obtain and keep jobs on a fair basis with men?

Would a reduction of retirement age by only three years have any real significance in alleviating, for example, the problem of the woman who is widowed at 45, 50 or later?

Would a reduction in age for women be merely a forerunner of a general reduction in retirement age for men, as well?

Children's disability benefits

Monthly benefits under OASI for dependent children, which now cease at age 18 for all children, would be continued beyond that age for totally and permanently disabled children and their mothers.

About 1,000 disabled children more than 18 would become eligible for benefits immediately, and about 500 reaching 18 would be added each year, with 5,000 children and their mothers receiving \$2,000,000 to \$3,000,000 a year in benefits eventually, the committee reported.

Extended coverage

Social security would be extended to cover:

► 200,000 lawyers, dentists, osteopaths, chiropractors, veterinarians, naturopaths and optometrists, leaving physicians the only uncovered professional group. The committee says it received numerous requests for coverage from members of these professions and that polls conducted by their organizations showed a predominance in favor of coverage.

► Certain farm owners who receive income under share-farming agreements.

► 20,000 workers engaged in production of turpentine and gum naval stores.

► 13,000 employes of the Tennessee Valley Authority.

► 200 employes of Federal Home Loan Banks.

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NATO chain of defense is
France whose troubles in
North Africa have forced
transfer of troops

Peaceful solution to
unrest in French Morocco
is vital to continued op-
eration of U. S. Strategic
Air Command bases



Strong nationalistic
movement in Algeria has
put France on spot. When
UN decided to debate the
issue, France walked out



NORTH AFRICA

PERILS WESTERN DEFENSE

**Here's an explana-
tion of a complex
problem that
threatens U.S. bases
and saps strength
of NATO forces**

AMERICANS have an unusually big stake in a peaceful atmosphere in seething North Africa. Officially, the United States government has taken a circumspect, hands-off policy toward French troubles in Morocco and Algeria but developments have been watched with great concern.

The United States has built four major air bases in French Morocco—at Sidi Slimane, Bennguerir, Boulhaut, and Nouasseur, each of which is militarily considered very important, or vital to the defense of the western allies in the event of war.

Our Strategic Air Command operates forces from each of the four bases. The significance of these bases is underlined by the fact that as of today from these four points our war

planes could reach, and destroy, certain key targets deep behind the Iron Curtain. These bases are so well placed that by utilizing them, our long-range bombers would not have to be refueled while winging over enemy territory.

In addition, Rabat, in French Morocco, is the site of the headquarters for the 17th Air Force, commanding our Air Force units not only in North Africa, but in the Mediterranean and Middle East areas as well.

The Navy also maintains a major installation in French Morocco, at Port Lyautey, which also serves as an air base in support of our Seventh Fleet operations in the Mediterranean Sea. From the military point of

view, French Morocco is one of the best—strategically located—areas available to the Air Force at this time. New bases are being built in Spain, but these are months away from completion and utilization.

Except for warfare with the Barbary Coast pirates between 1800 and 1815, the United States showed little interest in North Africa until World War II. Then, North Africa became the base for the assault on the European mainland via Sicily and Italy.

Since the development of the U.S. bases in Morocco, with French consent, the United States has maintained troops there, but the defense of the area and our installations is left to France.

The United States is naturally concerned lest civil war threaten the operation of the bases.

The United States is also concerned over the North African drain on French resources, especially military manpower. The French have already withdrawn three of the five divisions, which they had committed to NATO's line of defense on the European continent, to meet the situation in North Africa.

The French argue that, in defending North Africa, they are effectively defending the over-all interests of NATO. This argument has won little acceptance in the United States or NATO.

The United States has a third important interest in North Africa. Our government has been long contending with Russia for the affections of the so-called neutral Arab and Asian states. Every action taken by the United States offending one of these states affects our relations with the others. Thus, while scrupulously avoiding open criticism of France, we have carefully avoided showing active hostility toward the North African nationalists.

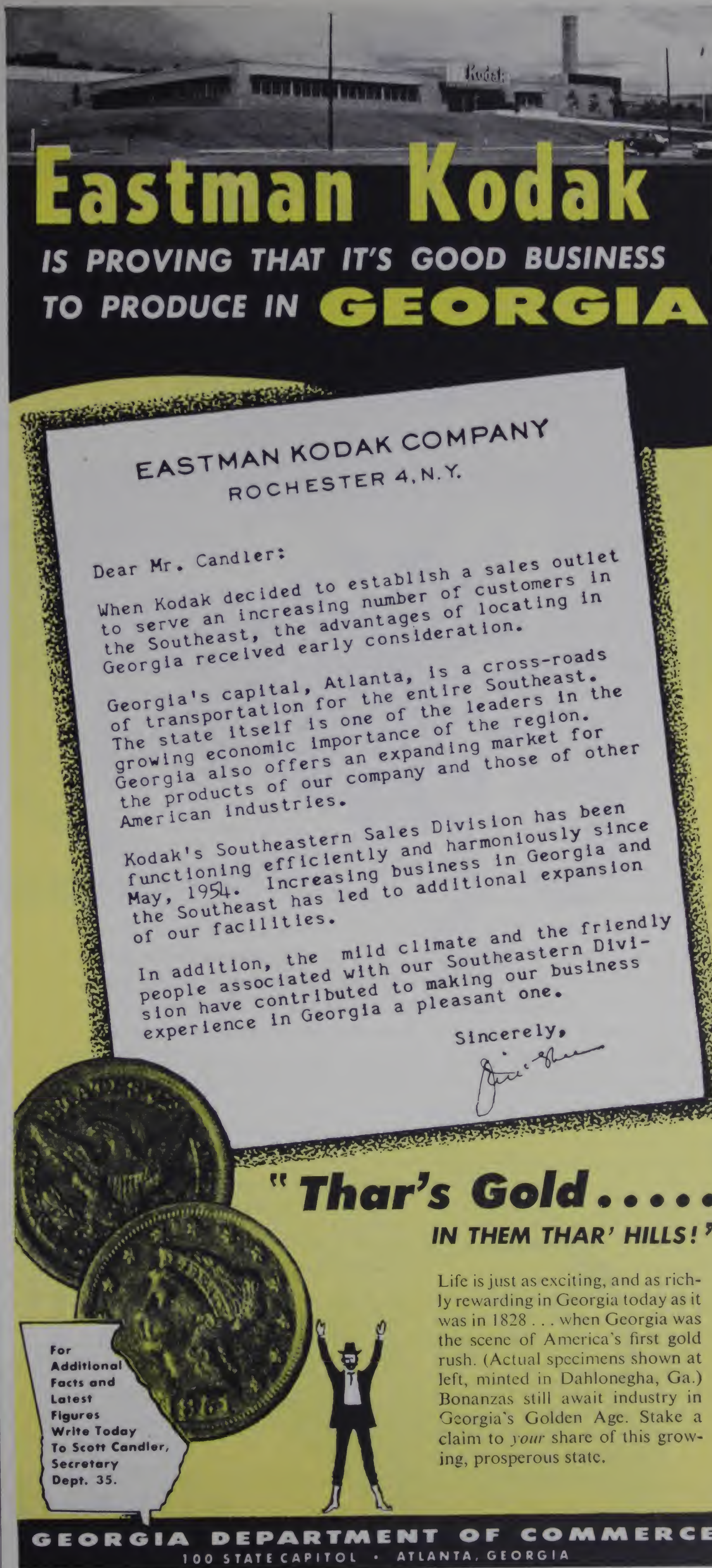
Even so, the Moroccan nationalists are resentful toward the United States over two issues:

Rightly or wrongly, the nationalists believed that President Roosevelt orally promised the since-deposed sultan—during the Casablanca conference of 1943—that the United States would help Morocco regain its independence. Second the nationalists charge that the French have been fighting them in North Africa with American-contributed arms and equipment.

French North Africa?

French North Africa is that part of the French overseas empire which stretches from the Mediterranean to the Atlantic across the northwestern corner of the African continent.

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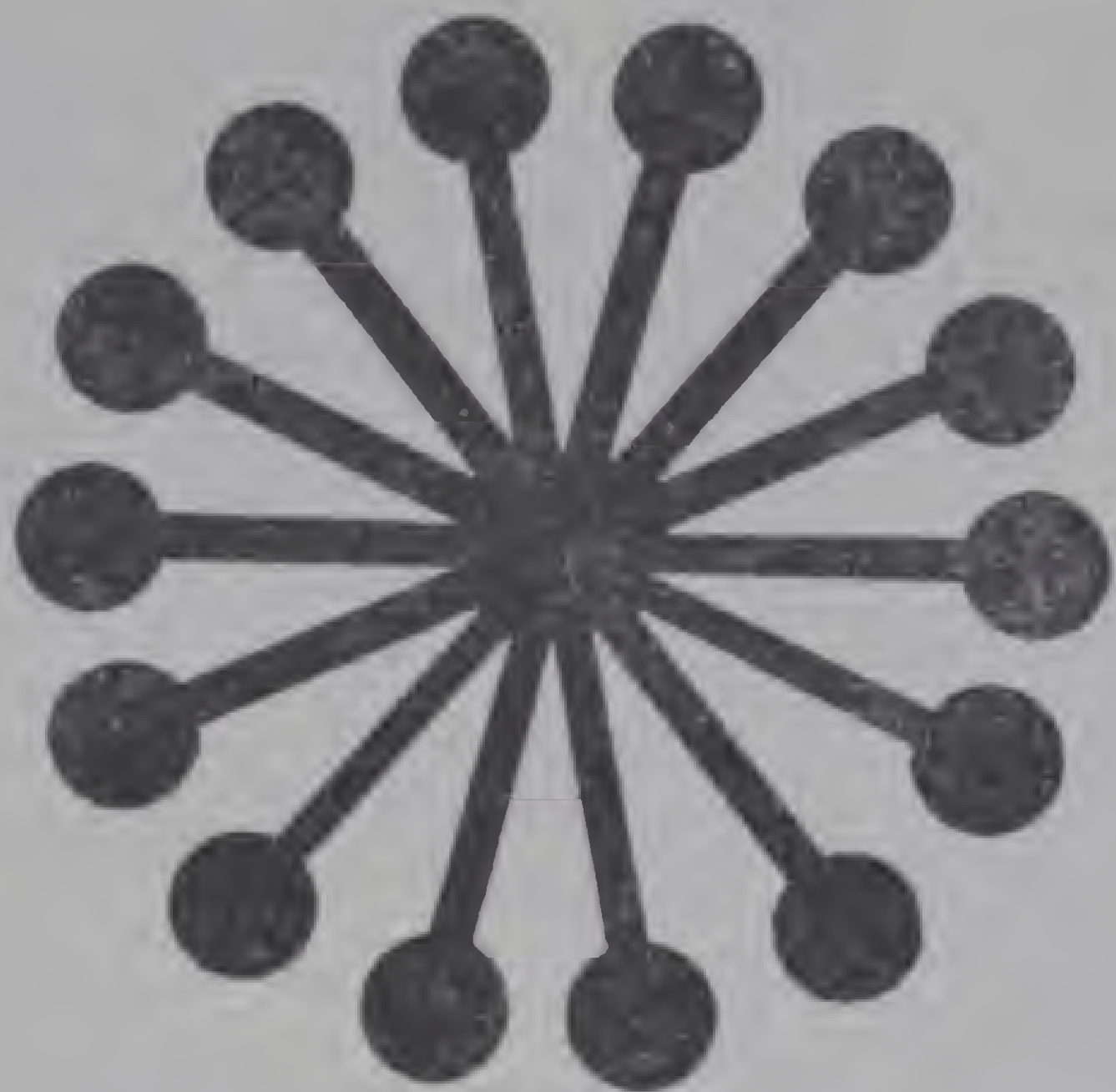
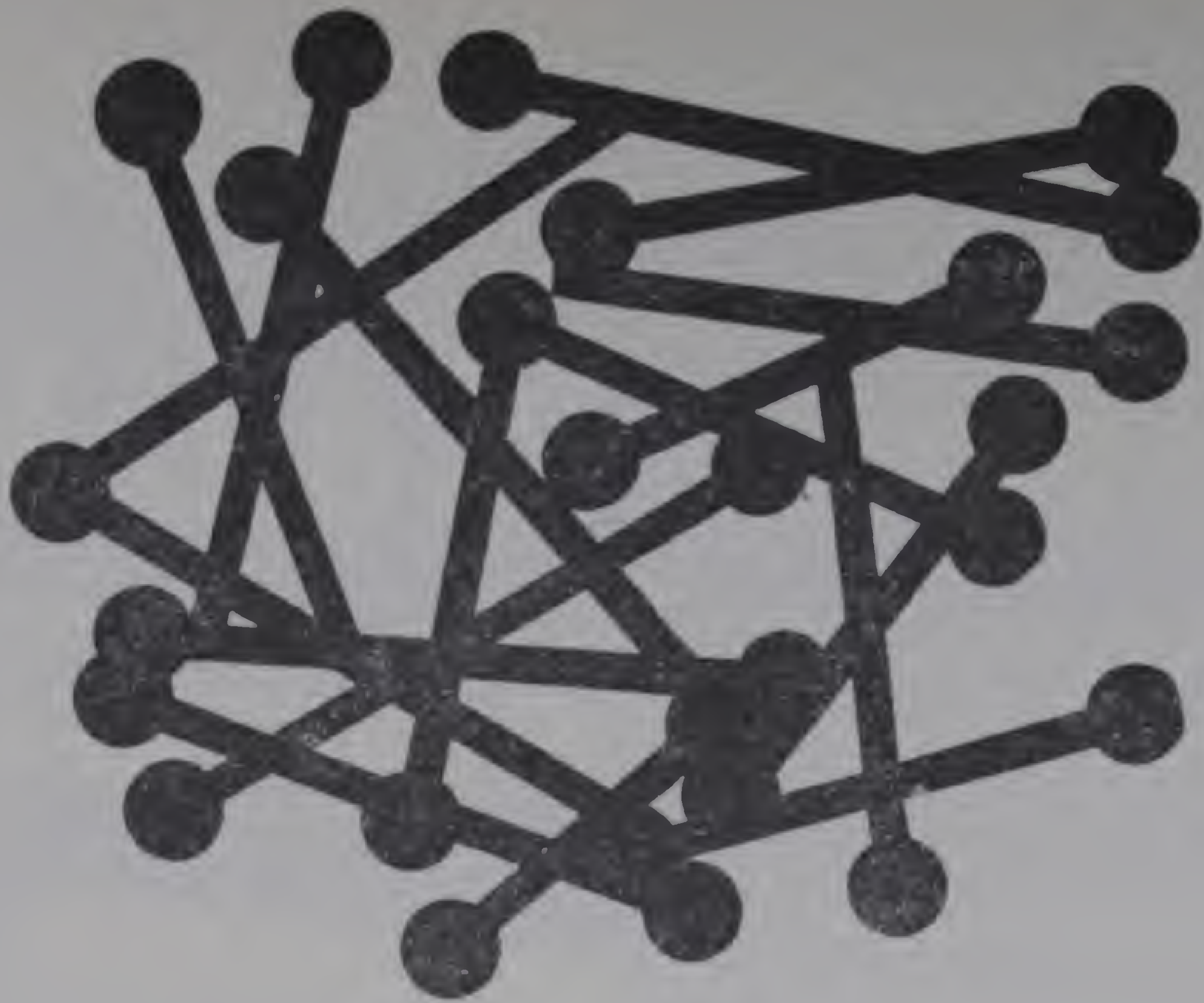
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NORTH AFRICA *continued*

mainland France, the Maghreb ("land of the setting sun") is comprised of Algeria, which has been made an integral part of France, and two flanking protectorates, Morocco, on the west, and Tunisia, on the east.

Although physically a part of the so-called Black Continent, French North Africa (along with Spanish Morocco) has throughout the ages been cut off from the rest of Africa by the Atlas Mountains and the Sahara Desert. Since antiquity, the history of the Maghreb has been influenced by incursions—and cultures—emanating from Europe and the Near East.

Who lives there?

The native stock of French North Africa—unlike the indigenous people below the Sahara—is white. The nomadic Berbers, of unknown origin, inhabited the Maghreb from earliest times.

Beginning about 800 B.C., the Berbers were successively forced under the rule of the Phoenicians (who founded Carthage on the Tunisian coast), the Romans (who sacked Carthage in the Punic wars), the Vandals (who overran Rome), and, in the Seventh Century A.D., the Arabs. Unlike the earlier conquerors, the Arabs remained and imposed both their Moslem religion and culture on the Berbers.

Israelites settled in the Maghreb during the pre-Christian era; others found refuge there after being driven out of Spain, along with the Moors, in the Fifteenth Century. The French first began to move into the Maghreb in the first half of the Nineteenth Century.

The population of French North Africa today is about 21,000,000, or just about half the population of mainland France. The Frenchmen number approximately 1,500,000; Jews, 500,000. The remainder are Berbers, Arabs, or a mixture of both.

How did France get there?

After having lost its principal possessions in North America, France, during the early 1800's, was eager to rebuild her overseas empire to keep pace with the expansion of the other European powers, especially England.

During the 1820's, while France was bickering with the Bey of Algiers, a notorious backer of Mediterranean pirates, the Bourbon king, Charles the Tenth—whose throne was tottering from internal pressures—converted the quarrel into war. Algiers fell to the French in 1830. It then took the French 18 years, at a cost of 150,000 French lives and vast financial outlay, to subdue the individual chieftains. In 1871, Al-

geria was made into an integral part of France.

Although France got its trade-foot into the door of Tunisia in 1830, it was not until 1881 that the bey formally accepted the protection of the French government. Tunisia was technically a tributary of the disintegrating Ottoman empire, but after the Russians defeated the Turks, and the continental powers met at the Congress of Berlin to divide the spoils, the French got the go-ahead on Tunisia from both England and Germany.

Beginning in 1905, France began a series of deals aimed at attaining control over Morocco. France quietly agreed to give England a free hand in Egypt; Spain, a free hand in northern Morocco; Italy, a free hand in Libya. In return, France was to get a free hand in Morocco. But Emperor William II of Germany balked. As a result, in 1906, 12 western powers—including the United States—signed an agreement reaffirming the independence of the sultan, but giving France and Spain special police powers there. A few years later, France bought off Germany, ceding 100,000 square miles of holdings in French Equatorial Africa for assent to move into Morocco. The sultan yielded to the "protection" in 1912.

Who is fighting whom?

Although the French governments have, over the years, had to repress or otherwise deal with Arab-Berber revolts and uprisings the fighting today is no simple case of French ruler versus subject. A dual civil war is going on, with extremists in both the French and native populations of North Africa assassinating the moderates who dare speak up for negotiations in place of all-out war.

Currently, quiet reigns in Tunisia, where the Neo-Destour Party, moderate nationalists, maintains leadership after having obtained home rule concessions during the past few months from the French government.

France's recent troubles have occurred in Algeria and French Morocco, where a series of incidents over the past two years culminated last August in the massacre of 51 French settlers at Oued Zem by fanatically whipped-up Berber tribesmen.

The events leading to this massacre began two years ago, when the French colonial extremists, headed by Marshal Juin, together with their principal ally, Thami el Glaoui, Berber pasha of Marrakech, forced the removal of Sultan Sidi Mohammed ben Youssef. Since his accession to the throne in 1927, the sultan had collaborated with the French

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NORTH AFRICA *continued*

but, about three years ago, under pressure of the native nationalist movement, he had become increasingly uncooperative. The French government was opposed to the change, but was too deeply involved in a general public service strike at home to care much about the sultanate. A more pliable puppet, Sidi Mohammed ben Moulay Arafa, was installed as Sultan of Morocco.

This act gave the Istiqlal, the leading native national group, an unexpected boost. Although the old sultan never had been popular before, his return to the throne—from exile to Madagascar—became the rallying cry of the nationalists. The opponents and supporters of the new sultan became increasingly terroristic in their activities against each other, and against moderates within their own ranks. Tension mounted. Incidents increased.

Several months ago, in an effort to find some easing of the tension, French Premier Faure sent Gilbert Grandval, who had earned a reputation as a tough but able administrator in the Saar, as resident-general to Morocco. He investigated, and urged that the puppet be deposed, an interim regency be set up, and negotiations opened with the native nationalists. He urged speed, action before Aug. 20, the date marking the second anniversary of the switch in sultans.

The French colonial extremists and the Berber chief, el Glaoui, opposed this solution. So did the conservative political bloc in France. Premier Faure, himself a moderate, delayed action and it was not until after Aug. 20—and the massacre at Oued Zem—that he forced his coalition cabinet to accept the principle of the Grandval plan—meanwhile, removing Grandval as resident-general of Morocco in way of propitiation.

Caught between the irreconcilable pressures demanding concession and repression, both in France and Morocco, the Faure government teetered for weeks in a state of near collapse, while members of the Faure cabinet, along with top level military and political officials, sabotaged the Faure move toward giving some home rule to Morocco.

Meanwhile, already-divided France became deeply embroiled in a new crisis over Algeria. The Moroccan outburst revived old fires of nationalism in Algeria, which for more than 100 years had been integrated as part of France. The French have been particularly proud of their development of Algeria, of making it a part of France, of giving Algerians the right to French citizenship. But even the so-called as-



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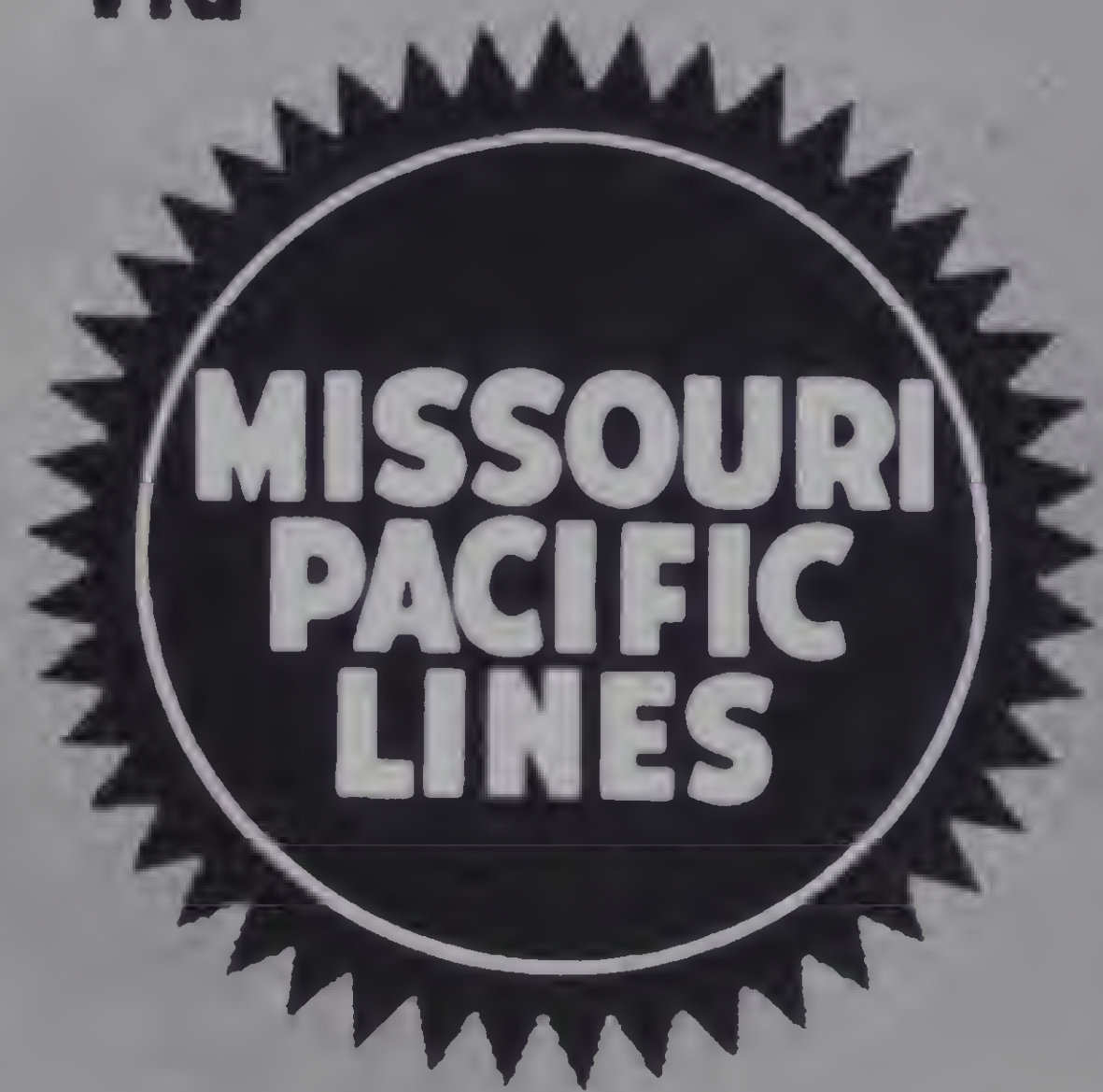
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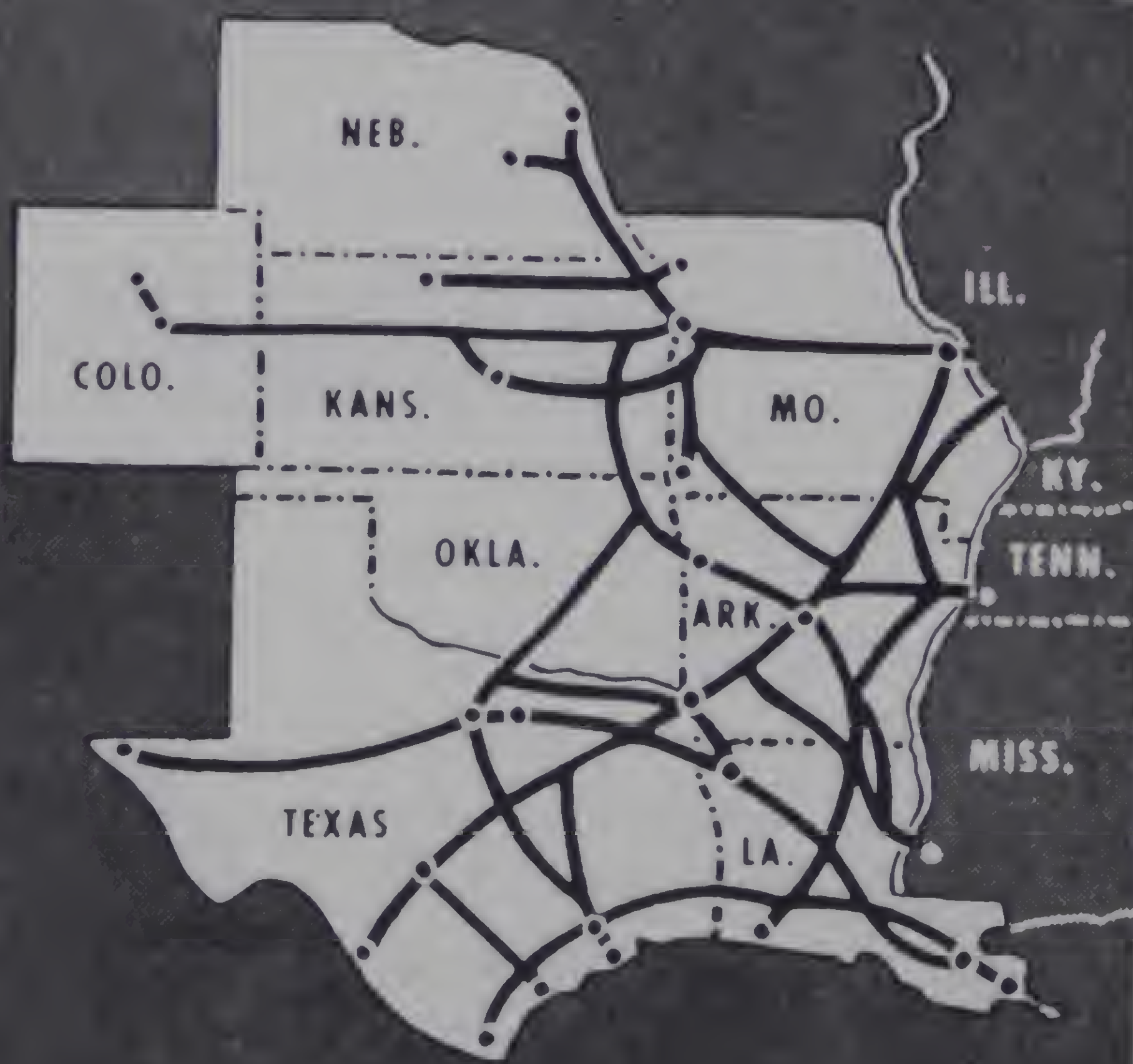
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NORTH AFRICA *continued*

simulated Algerians suddenly have publicly opposed integration, demanding autonomy if not actual independence.

This move was given further impetus when the United Nations General Assembly unexpectedly voted to take up the Algerian issue over French protests that the issue was a strictly domestic one. However, the anti-colonial Asian-Arab bloc, backed by Russia and her satellites, voted out the issue against the opposition of the United States and Great Britain. Outraged, France walked out of the UN Assembly.

The French defeat in the UN encouraged new outbreaks in both Algeria and Morocco, further complicating the situation.

Do the communists have a hand in the fighting?

Although the basic cause of the troubles in North Africa is the quest of the native peoples for home rule and independence, there is little doubt the communists have been helping the nationalists with funds and otherwise through the small communist parties in North Africa and the big communist party within France proper.

The North African Liberation Committee, a group seeking independence for all of North Africa, has been propagandizing the Maghreb via radio from Egypt and Syria. The Arab League has been similarly fostering discontent. Both groups are suspected of being financed in part by the communists. A communist station in Budapest beams similar broadcasts into North Africa.

The communists, as a matter of Moscow-directed policy, have generally been making a fetish of anti-colonialism and pro-Arabism. Additionally, it has been Moscow's policy to seek to weaken the North Atlantic Treaty Organization. Unrest in French Morocco forces France to move troops from the European to the African continent, thereby weakening NATO defenses.

In addition to communist aid, however, the nationalists in North Africa are believed to be getting both encouragement and assistance from naturally sympathetic fellow Moslem countries.

Why doesn't France get out of North Africa?

France couldn't get out of North Africa easily, even if she wished.

Algeria is, from the official French point of view, as integral a part of France as New Mexico is a part of the United States. Right now, at least, most Frenchmen would consider giving Algeria back to the

(Continued on page 76)



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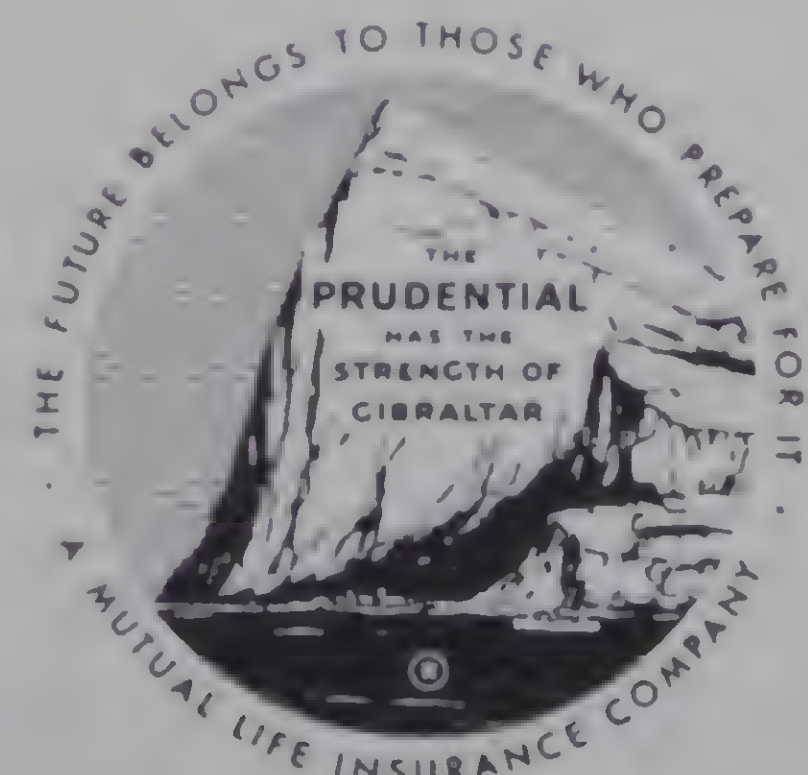
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SOLAR ENERGY

continued from page 43

Questionnaires were sent to specialists in all these cities to collect data on solar radiation, fuel prices, electricity prices, cost of certain construction materials, wages, and local interest rates. We obtained data regarding the cost of solar devices built in this country and abroad and estimated their ultimate probable cost if produced in larger quantities.

The most striking difference in the sites surveyed was the varying costs of conventional fuels—and we had selected large cities with adequate transportation facilities. For example, the least expensive common fuel in use in Nairobi, Kenya, cost six times as much as gas costs in Phoenix; in Casablanca, nearly seven times as much; in Jerusalem, nearly six times as much; while in Mexico City, natural gas, when available, costs slightly less than in Phoenix. There is a big difference when you compare the cost of solar devices in each of these cities with the cost of conventional units.

Strangely enough, the annual amount of total solar radiation available in the sites surveyed did not vary much. A difference of 50 per cent was found between the worst site and the best one. This was natural, since we had not selected cities well known for their lack of sunshine. Generally speaking, an evaluation of the economics of solar energy is not greatly affected by the annual amount of radiation reported.

Interest rates and taxes also did not vary as much as might be expected. In most cases we were able to evaluate the probable annual fixed charges at between ten per cent and 12 per cent. These charges included interest, depreciation, and taxes on the additional investment in solar equipment.

One big difference between the sites surveyed was the cost of labor and materials. An index of labor and materials costs corresponding to those of a solar device varied from 30 in Delhi and Mexico City to 100 in Phoenix. This index indicates that a solar device such as a flat plate collector or a water distiller could probably be built for less in those countries than here in the United States. On the other hand, we have seen that fuels usually cost more in these same countries than they do in Phoenix.

The ratio between a fuel cost index and a labor and materials index was prepared for the cities studied. Aside from taking into ac-

count the availability of sunshine, this ratio can be accepted as a preliminary indicator of the potential desirability for solar devices in the cities surveyed. The studies do not attempt to estimate probable productivity of labor in the future solar device industry. Although the ratio of fuel cost index to labor material index is highest in Kyrenia and lowest in Phoenix, where fuels are

cheap and labor expensive, we should not conclude too soon that, with mass production techniques, this index would remain as it is now. These conditions indicate that the present-day economics of many solar energy applications are more attractive where fuels are expensive and labor and materials relatively inexpensive.

Solar energy comes to us with a

The World Symposium on Applied Solar Energy is sponsored by the Association for Applied Solar Energy, the University of Arizona and Stanford Research Institute. It is headed by Lewis W. Douglas, board chairman of the Southern Arizona Bank and Trust Company and former U. S. Ambassador to Great Britain. His advisory council includes Drs. Charles G. Abbot; Farrington Daniels; Vannevar Bush of Washington's Carnegie Institution; Godfrey Lowell Cabot of Boston; L. J. Heidt and H. C. Hottel of the Massachusetts Institute of Technology; Harold Heywood of the University of London; architect Frank Lloyd Wright; George O. G. Löf of Denver; Eugene Rabinowitch, University of Illinois; Maria Telkes, New York University; Felix Trombe, director of the Solar Energy Laboratory, Paris, France, and E. J. Workman of the New Mexico Institute of Mining and Technology.

World-wide scientific participation in the Symposium has been financially supported by the National Academy of Science, the National Science Foundation, Ford Foundation, Rockefeller Foundation, Office of Naval Research, and the U.S. Air Force.

Industrial firms, research institutes, government agencies and colleges and universities will either present scientific papers or have exhibits at the Symposium. Included are General Electric Company, Convair Division of General Dynamics, Bell Laboratories, Johns-Manville Corp., General Mills, Pillsbury Mills, Libbey-Owens-Ford Glass Co., General Motors Corp., Patek-Phillippe of Geneva, Switzerland; American Window Glass Co., Western Brass Mills, Bjorksten Laboratories, Arthur D. Little, Inc.; American Gas and Electric Service Corp., Somor Company, Lecco, Italy; Meronit-Ashkolon Metal Works, Tel Aviv, Israel; Armour Research Foundation, Southwest Research Institute, Wright Air Development Center, Dayton, Ohio.

Also, the South African Council for Scientific and Industrial Research, Australia's Organization of Scientific and Industrial Research, Tokugawa Institute for Biological Research, Tokyo, the U. S. Army, Navy and Air Force, the Smithsonian Institution, U. S. Weather Bureau and the U. S. Department of Agriculture.

These universities likewise will be represented:

University of California, Berkeley; Massachusetts Institute of Technology, Harvard, Stanford, Princeton, Fordham, University of Texas, Wisconsin, Illinois, Arizona, U. C. L. A., California Institute of Technology, N. Y. U., University of Minnesota, University of London, University of Vienna. This roster does not include scientific representatives from some 30 foreign countries.

low energy flux. Before it can be used, it must be collected over a wide area, whether by a flat plate collector, a solar battery, an open pool filled with chlorella, or any other type of collector.

This limitation means that solar devices will usually have to be built in small sizes. I do not think we shall ever build solar power plants with a capacity of 100,000 kilowatts, but I am sure we shall build 10,000 plants of 10-kilowatt capacity.

If energy storage is available, there is every reason to believe that all the solar energy that can be collected can be used.

The efficiency with which we convert solar energy into usable energy will also directly affect costs. An inefficient process requires much more collecting area per BTU collected than an efficient process, and cost is often nearly proportional to the collecting area required.

Our study showed that heating water with the sun was economical in nearly all the locations we surveyed. Although the initial cost of a solar water heater is perhaps two or three times the cost of a conventional heater, the conversion of solar energy into heat stored in a hot water tank can be performed at 50 per cent efficiency, which is high. Storage is not too expensive or inconvenient.

An important potential use of solar energy is space heating. Unfortunately, the economics of total solar space heating are not as clear cut. Total solar space heating usually means that a low use factor will result. The heating season will only last a few months of the year, and even with some daily storage facilities, it is not usual to expect a collector use factor above ten per cent. Ninety per cent idleness on any piece of equipment is bound to be expensive, and the most economical way to design equipment used a small portion of the time is to keep investment cost to a minimum and accept higher operating charges.

On the other hand partial solar space heating is already economical. We have all used solar energy for partial heating of our own homes. South walls and south windows are collectors, and during sunny days fuel bills are less than during cloudy days. The economic use of solar space heating can be achieved by integrating the design of collectors in the design of structures, that is, the collector can also act as a wall or a roof so that the additional cost of building a collector is kept low. In this way we can surely design houses that use the sun for 50 to 80 per cent of their heat requirements.

Solar house heating is not neces-

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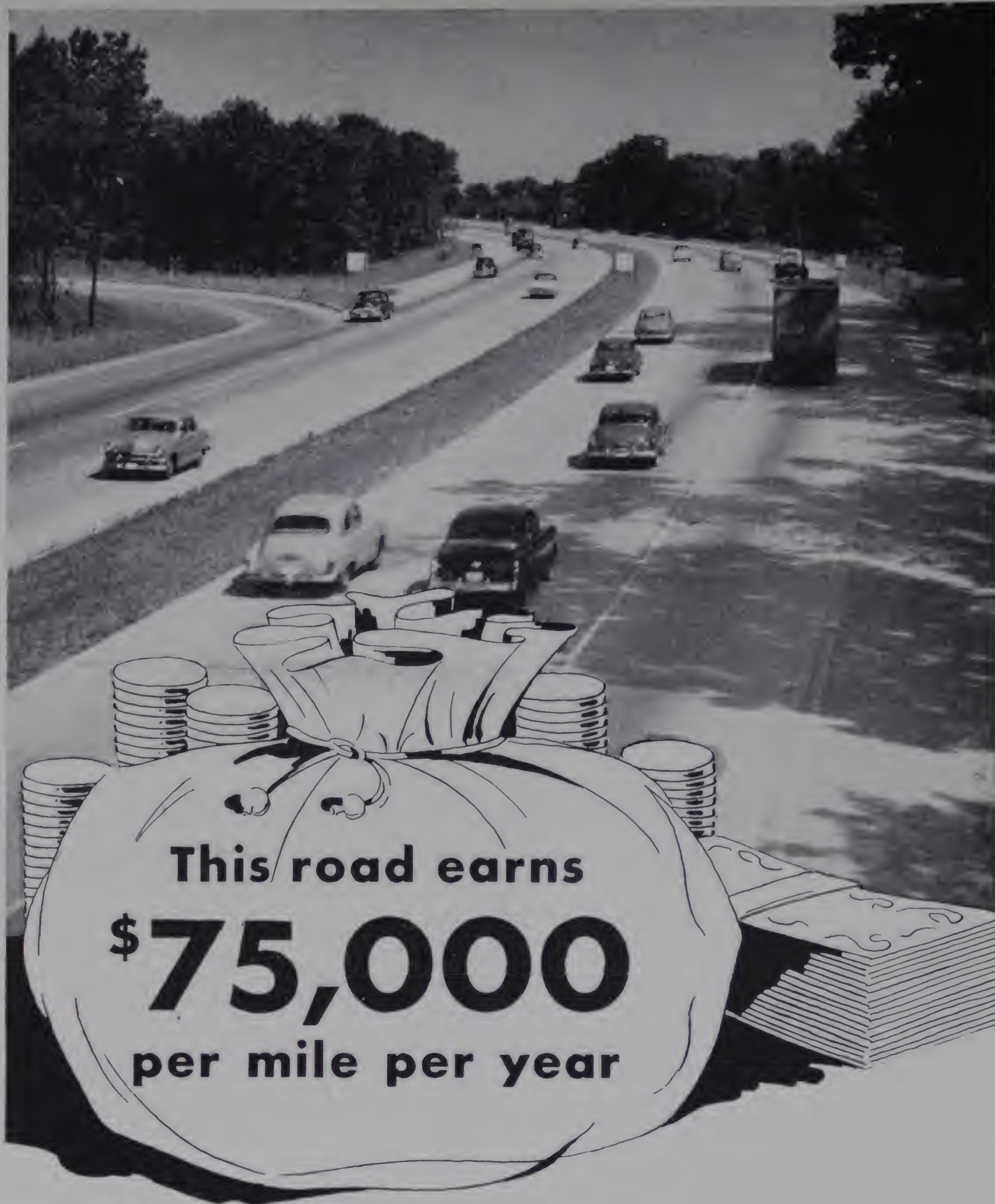
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A road earning money? Absolutely—in the form of gas taxes and license fees you pay to drive on it. The more vehicle miles of traffic a road handles the more money it earns.

This concrete road is Edens Expressway north of Chicago. The section shown carries a daily average of 28,000 vehicles.

The number of vehicles traveling this road per day	28,000
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Equals this road's earnings per day per mile	\$204.40
Times the number of days in a year	365
Equals the annual earnings of this road per mile	\$74,606
Minus the annual cost to build and maintain such a road during its expected lifetime	\$15,000
Equals the annual net profit this road earns per mile	\$59,606

Concrete roads are the biggest money-makers because they attract the most traffic and have the longest life and lowest annual cost. Other pavements often fail to earn their building and maintenance cost. This drain on available funds leaves less and less for new highway construction.

To motorists, who pay for highways, this is an important reason why all main roads should be paved with concrete.

PORTLAND CEMENT ASSOCIATION, 33 W. Grand Ave., Chicago 10, Ill.

A national organization to improve and extend the uses of portland cement and concrete through scientific research and engineering field work

SOLAR ENERGY *continued*

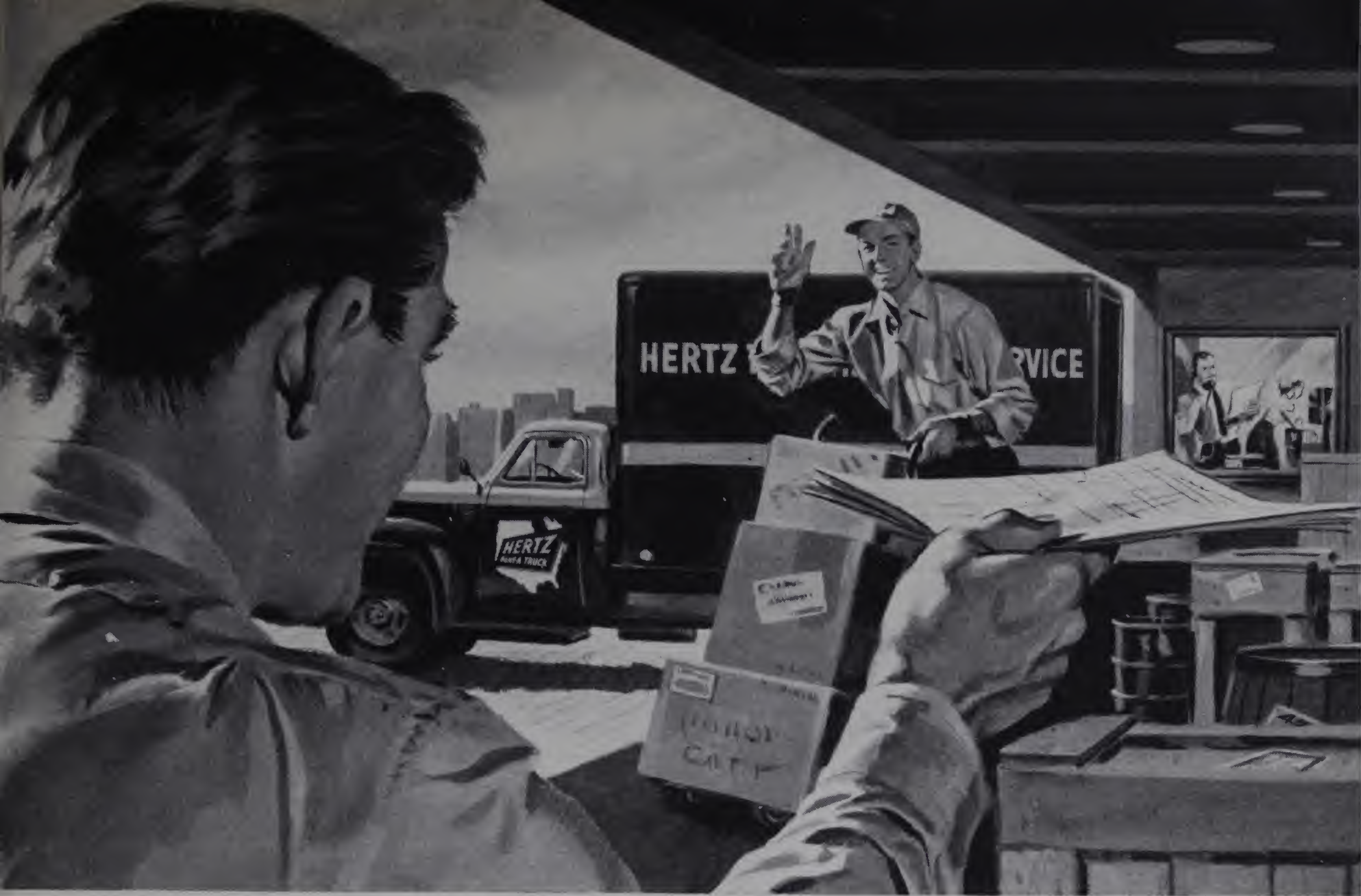
sarily more economical in areas of plentiful sunshine and mild weather. It is more economical where the cold season is long and the weather clear, since a long heating season means an improved use factor. There are many locations, especially in the mountains at high altitudes, where solar space heating can be utilized economically today.

Solar power has been the dream of many men. Solar power and solar machines can be economical. Even with no storage device, solar power can be used for isolated rural loads where low use factor and intermittent service are permissible. Two of the most promising loads are irrigation pumping and cooling cycles. Our estimates indicate that intermittent solar power is not cheap power in terms of the cost of power delivered by large steam or hydro stations, but it is often much cheaper than the cost of power delivered to rural consumers in isolated locations; as such, it is being used today in Italy and other countries.



In most of the sites surveyed, the cost of power from the sun ran at about five cents per kilowatt hour, which compares with the average cost of power in modern steam stations in this country of about six mills, or 0.6 cents per kilowatt hour. On the other hand, residential and rural electric rates vary the world over. For example, in Dakar a kilowatt hour costs as much as 16 cents.

Using the sun to convert sea water into fresh water is another important potential use of the sun's energy. It stirs the imagination to think of the possibilities of converting vast quantities of ocean water and irrigating the deserts of the world. Much research will be need-



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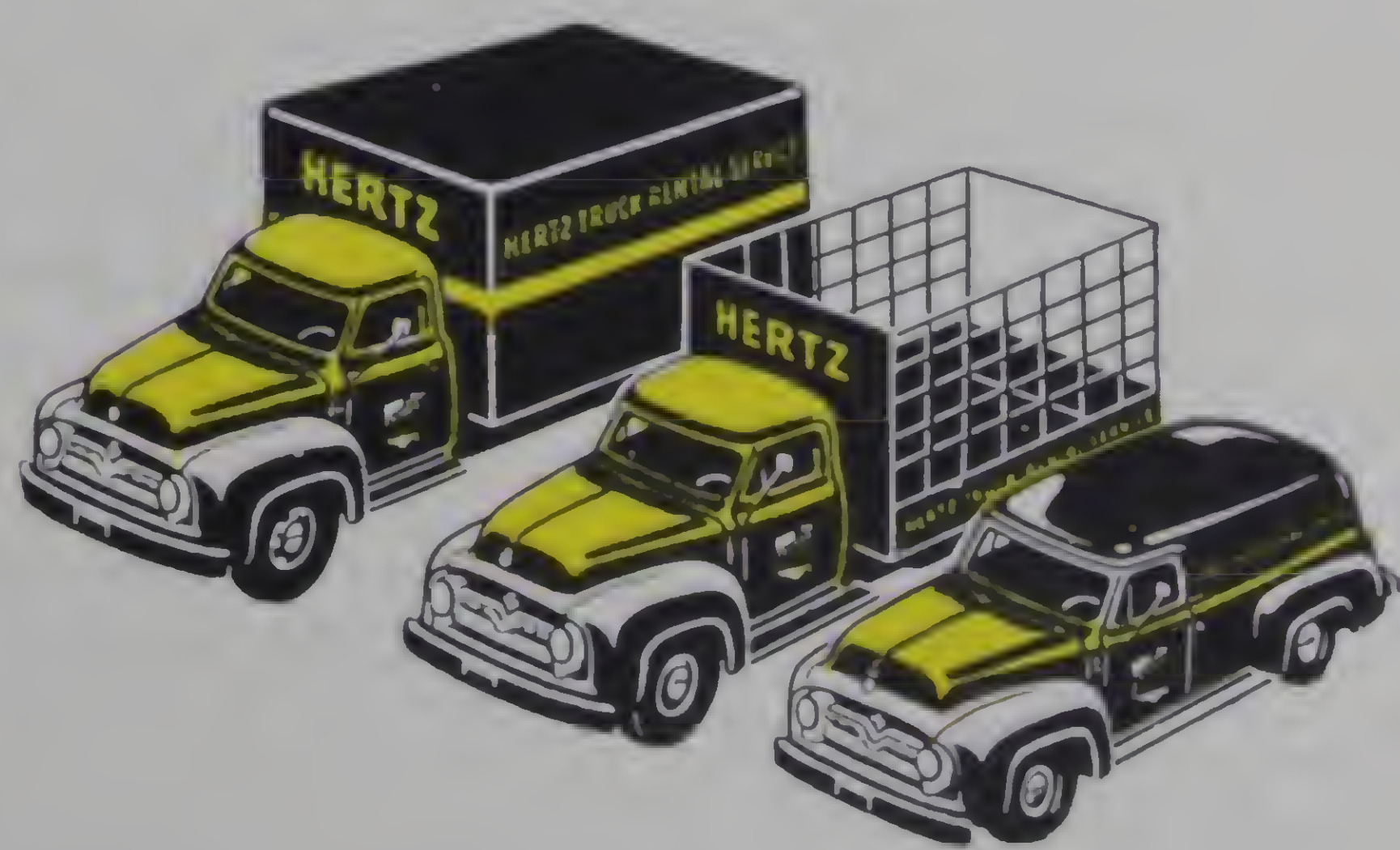
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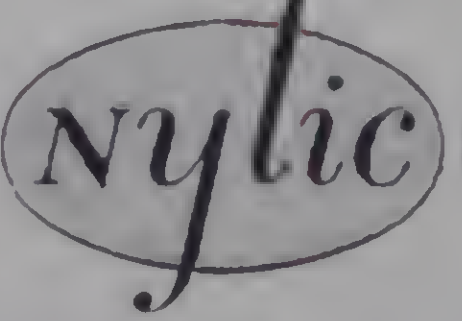
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SOLAR ENERGY *continued*

ed before we can do this with solar energy and obtain water at prices competitive with the cost of irrigation water or at a cost cities are willing to pay. But again, a market already exists for solar water distillers in many parts of the world where today either brackish waters are consumed or no drinking water supplies are available.

We are already encountering financial problems. For example, a solar cooker like the one for sale in India can be economically used by many poor people in many underdeveloped parts of the world. If you calculate how much a village or town dweller in India, or in Mexico, or in Egypt spends each year in charcoal or wood or kerosene to cook with, you will be surprised to find that it amounts to nearly five per cent of his total annual income. Even when his annual income is less than \$100 per year, his fuel bill is still about \$5 per year. A cooker priced at \$10 to \$15—like the one for sale in India—is certainly economical, especially if it will last more than three years.

High capital requirements indicate that it will not be easy for underdeveloped countries to utilize this energy immediately. These countries will need the help of the capital markets of the world to supply them with ways and means of using this resource.

In this country we have become conscious of the importance of financing. We help finance the sale of many durable goods—homes, cars, refrigerators. In the same way, we shall have to finance the sale of solar pumps, of solar cookers, of solar house heating installations. It is up to us to make responsible financial leaders, bankers, insurance companies, and our own governments aware of these needs so that their help and interest will assist in financing the market for solar installations.

Much has been said about the importance of solar energy in the economic development of nations. Atomic energy or solar energy will mean an era of plenty for all of us. But I do not believe cheap atomic power or cheap solar power will radically change conditions of our life. A cheap, or relatively cheap, source of energy will not greatly affect the cost of manufactured products or services.

On the other hand, nothing is as expensive as the lack of power or the lack of energy. A nation or a

city or a village with no energy resources cannot develop industrially and must devote all human and animal energies to subsistence farming. Using the sun's energy will be a way to develop these areas which now have little conventional energy resources and few transportation facilities.

Research is badly needed to solve many problems connected with solar energy. We must find a practical and economic energy storage device. If we could store energy cheaply and efficiently, there is no doubt that the major drawbacks to using the sun's energy would disappear.

We must also develop new and efficient converting processes as well as cheap and efficient collecting surfaces.

We need to study new materials like plastics that show promise of lightness, durability, and low cost.

We must study and develop markets for solar energy and must make our knowledge available to those who need it.

END

STATEMENT REQUIRED BY THE ACT OF AUGUST 24, 1912, AS AMENDED BY THE ACTS OF MARCH 3, 1933, AND JULY 2, 1946 (TITLE 39, UNITED STATES CODE, SECTION 233) SHOWING THE OWNERSHIP, MANAGEMENT, AND CIRCULATION OF NATION'S BUSINESS published monthly at Dayton, Ohio, and Washington, D. C., for October 1, 1955.

1. The names and addresses of the publisher, editor, executive editor, and business manager are: Publisher, Chamber of Commerce of the U. S. of America, Washington, D. C.; Editor, Alden H. Sypher, Washington, D. C.; Executive Editor, Paul McCrea, Washington, D. C.; Business Manager, John F. Kelley, Washington, D. C.

2. The owner is: Chamber of Commerce of the United States of America, said body being an incorporated organization under the laws of the District of Columbia, its activities being governed by a Board of Directors. The officers are as follows: President: A. Boyd Campbell, Chairman of the Board, Mississippi School Supply Company, Jackson, Miss. Chairman of the Board: Clem D. Johnston, Blue Hills Farms, Roanoke, Va. Chairman of the Executive Committee: Richard L. Bowditch, Chairman of the Board, C. H. Sprague & Son Company, Boston, Mass. Treasurer: Russell C. Harrington, Resident Partner, Ernst and Ernst, Providence, R. I. Executive Vice President: Arch N. Booth, Chamber of Commerce of the U. S. A., Washington, D. C. Vice Presidents: Melvin H. Baker, Chairman of the Board, National Gypsum Company, Buffalo, N. Y.; J. H. Carmichael, President, Capital Airlines, Inc., National Airport, Washington, D. C.; Clyde B. Dempster, President, Dempster Mill Manufacturing Company, Beatrice, Nebr.; Henry Kearns, Owner, San Gabriel Valley Motors, San Gabriel, Calif.; William A. McDonnell, President, First National Bank in St. Louis, St. Louis, Mo.; Charles G. Nichols, President, The G. M. McKelvey Company, Youngstown, Ohio.

3. The known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: None.

4. Paragraphs 2 and 3 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting; also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner.

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Signature of Business Manager
Sworn to and subscribed before me this 13th day of September, 1955.
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More firms shift to **NATURAL BUSINESS YEAR**

► **Many firms find natural business year accounting improves their balance sheets, smooths way for better financial planning.**

You may profit from their experience

THOUSANDS of U.S. business firms which used to add up their year's operations on the traditional New Year's Eve are taking a fresh look at their financial record keeping. They are finding it pays in many ways to close their books at the end of a natural business year, no matter when it falls.

This is why:

Accountants figure a natural business year as closing at the low point of inventories, accounts receivable and loans outstanding. This means inventory is easier to take and easier to evaluate. Counting of stocks is less burdensome, too, when employees are not on a heavy schedule of manufacturing or selling.

From a credit standpoint, accountants point out, the balance sheet never looks better than at the end of the natural business year. Since inventories and receivables are low, cash position is good—and banks, figuring their credit risk on a firm's liquid assets, like the system because they take less chance on the value of inventories and accounts due.

Here are other reasons for the natural business year cited by the American Institute of Accountants:

1. The income statement means more; it shows the results of operations for an entire annual cycle of activity, where the calendar year statement (as of Dec. 31) may show the end of one season combined with the beginning of the next.

2. Financial statements are more useful for planning future operations

when they are prepared after the close of a busy season rather than in the middle of it.

3. Tax disputes are minimized. One of the principal reasons for government challenge of tax returns is disagreement on inventory valuation. When inventories are at a low point, the area of possible dispute is narrowed.

4. Choosing a fiscal closing date other than Dec. 31 means a firm can avoid the peak demand for auditing services—and therefore the audit can be finished in less time.

Hercules Motors Corporation recently came up with an added reason: Many of the firm's suppliers and customers close down during the first two weeks in July for vacations and inventory taking. To avoid production losses during this period, Hercules adopted the same plan. Stockholders approved a change in the fiscal year after being told that "under the circumstances, July 31 is the normal time for closing the books and a fiscal year ending on that date will result in more efficient operation."

Some companies avoid the summer months for a fiscal year ending because of vacation schedules. Others, however, let the inventory crew start its vacation at the end of the inventory count and the accounting department take vacations at times other than the month following the end of the fiscal year.

The American Institute of Ac-

countants says some companies have hesitated to abandon the traditional Dec. 31 closing because of problems involved in comparing statistics. However, the Institute points out, comparison of the company's own statistics from year to year presents no problem since accountants can prepare fiscal year financial statements using monthly records to adjust old calendar year statements.

Comparing an individual firm's statistics with those of its trade association might present some difficulties, the AIA says, particularly if industry-wide statistics are compiled for the calendar year and not on a monthly basis.

Statisticians from some of the largest trade associations, however, agree that no serious difficulties are involved.

As far as accountants are concerned, the ideal system would have all companies in an industry closing on approximately the same date, based on the industry's natural business year. This has been accomplished to a considerable extent in a few industries—meat packers, for example, close their books at the end of October, department stores on Jan. 31.

Trade associations in some cases have encouraged their members to follow the practice. The American Hospital Association recommends that hospitals adopt fiscal years ending Sept. 30 and requests all data on this basis in its annual census form.

The AIA recently surveyed about 200 major industries to prepare an up-to-date list of suggested closing dates for various types of businesses. Dates other than Dec. 31 are suggested in 94 per cent of the classifications.

The list can be obtained from Dept. NB, American Institute of Accountants, 270 Madison Avenue, New York 16, N. Y.

In some cases, of course, the natural business year will coincide with the calendar year. Changing to a fiscal year for income tax reporting has been simplified by the Internal Revenue Service. For example, no advance permission is needed for a

change to a fiscal year ending within three months before or after the end of the current tax year—provided no change in accounting procedures has been made in the previous five years and certain technical requirements are met.

A new company can adopt its natural business year as a fiscal year simply by a provision in the company by-laws. The first tax return is submitted for the period from the start of the business until the end of its designated fiscal year.

Natural business year accounting is getting a new head of steam after a good many years of coasting along. The Federal Corporation Excise Act of 1909, repealed in 1913, forced corporations to report on a calendar year basis. Tradition, however, kept thousands of companies playing the game according to the old rules. To see which way the financial wind might be blowing, the AIA this year completed a survey of its own members—all certified public accountants—and found that 35 per cent of their clients are using the natural business year instead of the calendar year.

In 1926, last date of a member-

ship-wide survey on the subject, only 20 per cent reported they were using natural business years.

Companies which have adopted natural business years are almost all sold on the change, the AIA reports. Accountants said, in 96 per cent of the replies to the 1955 survey, that their clients are satisfied with natural business year accounting. The remaining four per cent said most of their clients are satisfied.

The AIA survey indicates that the pressures of business during World War II, the postwar readjustment, and Korea, have caused delays in considering accounting changes.

Now more and more companies are asking themselves these questions:

When is our inventory at its lowest point? When do we have the fewest accounts receivable on the books? When are our bank loans at a low point? When are most of our employes available for taking inventory?

Unless the answer to all these questions is close to Dec. 31, AIA says the calendar-year company may find it profitable to consider a switch to fiscal year accounting. **END**



WHAT IS YOUR NATURAL BUSINESS YEAR?*



Type of Business	Last Day of	Type of Business	Last Day of
Manufacturing		Retail Trade	
Automobiles	Sept.	Automobiles	Oct.
Beverages	Sept.	Department stores	June
Brick, clay products	Oct. or Mar.	Drugs	Jan.
Cement	Jan.	Electrical appliances	June
Crockery, glassware	Jan.	Furniture	June
Electrical equipment	Sept.	General merchandise	Jan.
Fertilizer	June	Groceries	June
Floor Coverings	June	Office supplies	May
Foundries, machine shops	Jan.	Restaurants	June
Furniture	Dec. or Nov.	Service	
Dairy & produce	Feb. or Mar.	Cleaners	Nov.
Glass	June	Garages	Sept.
Ice cream	Dec.	Laundries	June
Lumber products	Oct.	Warehouses	Mar.
Sheet metal	Mar.	Wholesale Trade	
Office equipment	June	Auto accessories	Jan.
Steel & iron	June	Drugs	June
Tires, rubber	Oct.	Dry goods	Dec. or Nov.
Real Estate & Construction		Produce brokers	June
General contractors	Feb.	Groceries	June
Paving contractors	Mar.	Paper	June
Real estate agencies	Sept.	Plumbers' materials	Feb.

*Partial results of survey conducted by American Institute of Accountants.

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SCHOOLS' FUTURE

continued from page 39

About 40,000 teachers are not adequately prepared and many are serving only until more qualified teachers can be found.

About 35,000 high school teachers (out of 376,000) quit each year. Higher enrollments require another 5,000. Overcrowding is not yet acute in high schools. The bulge will hit there within a few years.

These figures account for today's demand. The outlook is for enrollments to increase further.

The annual supply of new qualified teachers now reflects low birth rates of the 1930's. The number of college graduates has fallen 34.4 per cent in the past five years. The number qualifying to teach has dropped 24.9 per cent. Last spring's graduating class had 35,278 candidates for grade school jobs and 51,418 for high school jobs. The total, 86,696, had 205,000 teaching jobs to fill. Deficit: 118,304.

Big questions for the White House Conference are:

How to get teachers: Easing the teacher shortage involves more than encouraging college attendance. Many trained to teach do other things. Last year 44 per cent of the graduates trained for high school jobs did not take up teaching.

"Furthermore," the subcommittee says, "the loss was greatest in the fields of greatest need—sciences, mathematics and agriculture."

How to keep teachers: Good school administration is cited as an important factor in both getting and holding teachers. Working conditions is another. This involves such things as sick leave, health and retirement benefits, tenure, size of classes, supplies and equipment available, responsibility for fund drives and other extra work.

Opportunities for accomplishment

and prestige are factors. Says the subcommittee: "Few people are satisfied on a job which gives them no sense of accomplishment, or no chance for advancement." As for prestige, pay is one evidence of this.

The subcommittee raises the question of whether superior teachers can be paid more than the salary schedule provides. The group points out that the shortage of teachers is not a shortage peculiar to teaching alone, but that it is a part of an overall shortage of trained manpower.

Most efficient use of teachers: The subcommittee does not overlook the importance of making better use of teachers already available: ". . . if the present teacher supply is to be stretched, many feel it can be done only by careful study of what teachers now do and what could be done as well by someone whose training and experience is in greater supply."

5. How can we finance our schools—build and operate them?

State and local government expenditures for education were \$9,390,000,000 in 1953, compared with \$2,638,000,000 in 1940 and \$255,000,000 in 1902. Education was 25 per cent of total expenditures for these governments in 1902; 29 per cent in 1940, and 34 per cent in 1953. Education expenditures per capita rose from \$3.22 in 1902 to \$58.82 in 1953.

Public education is financed chiefly from local government funds, although the proportions supported by state and federal funds are steadily increasing. Public elementary and secondary school costs, in 1954, were met 60 per cent from local funds, 38 per cent from state funds, and two per cent from federal funds. The 1920 proportions were: local funds 83.2 per cent, state funds 16.5 per cent and federal funds 0.3 per cent.

WHITE HOUSE CONFERENCE WILL HELP YOU DECIDE:

Should the federal government be asked to pay more for education?

If so, how much and how will funds be distributed?

If not, where will the money for expanding schools needs come from?

What can you do to help keep 95,000 teachers from quitting each year?

Should good teachers get merit pay increases?

What are true classroom needs? Have requirements been exaggerated?



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SCHOOLS' FUTURE

continued

State revenue sources are more readily expanded than local property taxes, and underlie the increasing state participation in school cost. Federal aid to education last year was more than \$300,000,000, including the school lunch program, cooperative vocational education aid, federally affected areas assistance, and other programs. Whether this aid should be expanded may bring the hottest argument at the Conference:

Arguments for federal aid usually hinge upon the differences in financial ability among the states. Per capita income varies from \$2,414 in the highest state to \$873 in the lowest. Income per school-age child varies from \$3,088 to \$12,366. Average teacher salaries vary from \$1,741 in one state to \$4,800 in another. Average pupils per teacher from 14.6 to 30.6, and school days attended per pupil from 140 to 176. Median expenditure per classroom varies from \$1,451 to \$7,627. Average value of public school property per pupil varies from \$137 to \$790.

Reflecting these variations in financial ability and classroom activity, one state's adults average 7.6 years of education, and another 12 years. Per cent of population with less than five years of schooling varies from 3.9 per cent to 28.7 per cent, and those with four years or more of college from 3.1 to 8.1 per cent.

From these differences rise a demand for federal funds to provide a national basic minimum level of education, and assistance for school building needs.

Arguments against federal aid cite the remarkable progress of education under the state and local system. The illiteracy rate has dropped from 20 per cent in 1870 to six per cent in 1920 and two per cent today.

Most serious educational deficiencies can be pinpointed largely among Negroes in the rural sections of some low-income southern states. These are also the states and areas which have made relatively greatest progress in recent decades.

Although variations are wide among states, disparities within individual states are more extreme. A United States Office of Education study of 1949-50 school expenditures showed Mississippi had 323 classroom units with an expenditure more than \$4,000, but 1,526 units below \$400. New York had 228 classroom units over \$12,000, but 391 units below \$2,600. Illinois had 239 classroom units over \$12,000, but 341 below \$1,600. Assessed valuation per

classroom unit in Minnesota varied from \$467 to \$169,736, and in Arizona from \$15,761 to \$2,123,809. In Florida the variation was from \$29,380 to \$269,946, and in larger New York districts from \$47,227 to \$620,917.

Can states with low incomes be expected to tax themselves more heavily than wealthier states to produce minimum educational standards? Some states with low fiscal capacity have been, and are, maintaining good schools. There always will be states and communities which wish to exert a greater effort for education than others.

The ratio of per capita income between the wealthiest and poorest state has shrunk to almost half in the past two decades, but differences in financial ability among states are still wide. Whether these differences will continue to shrink, whether we can depend upon economic forces and can afford to wait, or whether the federal government should act now is the major issue in the school aid controversy.

6. How can we obtain a continuing public interest in education?

In the final analysis, the school is what the public wants it to be. A comparative few today are taking any active part in solving school problems. The subcommittee points to the importance of presenting fundamental issues. The public, it says, is not interested in trivia—how to buy a movie projector, get the auditorium curtains cleaned. Intelligent school planning can be done only by those who understand such matters as amount of money being spent per pupil, how teacher salaries compare, number of children expected to be in school during the coming decade.

More important, says the subcommittee, are such basic questions as desires and needs of the population.

The subcommittee cautions against the use of public relations techniques: "Their purpose usually is to tell what is good about the product, rather than to seek understanding of weaknesses.

"In education, the problem is different. If the public understands the weaknesses of a school, it can usually be expected to help remedy them."

The report cautions also against releasing only favorable facts—until money is needed.

"To prevent confusion," the report says, "a balanced picture of school problems and school goals, school strengths and school weaknesses, is necessary."

END



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One Convair solar furnace is made from converted searchlight

SUN'S POWER

continued from page 42

using up the capital in the bank. The rural areas, however, are living on current income of sunshine through agriculture and human and animal labor.

"... Eventually, at the present rate of consumption, we will have to find other ways to run our machines. Our rapidly increasing population and our still more rapidly increasing demands for industrial energy may well bring on a crisis of insufficient fuel for the world much sooner than we now anticipate."

Dr. Furnas expands on this theme:

"An unprecedented population upswing will increase world population from 2,400,000,000 today to 6- to 8,000,000,000 by the year 2050," Dr. Furnas says, "and the United States population a century from now will be at least 375,000,000."

"As population becomes more concentrated, people cannot be supported by old-style subsistence agriculture. They will lean more toward industry, which requires more energy. Hence increasing population and concentration of population means increasing the required energy supply per capita—and thus the world's energy demands will increase more rapidly than population."

"If world population increases threefold and the present per capita increase in energy output continues, then by 2050 A. D. the world need for annual energy output will have increased 2,250 per cent, or 22½ times its current rate."

Where can this enormous supply of energy be found? Scientists indicate that the hydrogen bomb fusion process may eventually be controlled to provide steady energy sources; that photochemistry may unearth new and more powerful sources of energy; that present fuels can be more efficiently used; that solid-state physics may disclose the secret of converting energy sources

directly into electricity, as it has begun to do in the case of Bell Laboratories silicon solar battery—and, finally, that man can, and must, control and use the inexhaustible energy from the sun itself.

The potentialities of solar energy are enormous, as are the technological problems involved in collecting and using it. The solar energy falling on Boulder Dam's Lake Mead, for example, exceeds by five times the rate that power is generated by the hydroelectric generators of the dam itself. Solar energy received in the United States alone in one year is equal to 9,000 trillion kilowatt-hours, or the equivalent of 1,150,000,000,000 tons of coal.

Despite technical and economic hurdles, considerable progress is being made in the utilization of solar energy. Perhaps of greatest current interest is the Bell solar battery, an experimental device that converts sunlight directly into electrical power with no intermediate steps.

The battery is at least 15 times more efficient than the best previous solar energy converter, which makes it the first real solar power supply. It has no moving parts or corrosive chemicals and therefore should last indefinitely. Its efficiency of conversion of available light remains essentially constant even in poor light. It charges a storage battery at constant voltage and a storage battery-solar battery combination can average a steady power output through days and nights and during periods of good and bad weather.

The solar battery is currently

undergoing tests in Georgia, where it supplies power for a rural telephone line. If the tests are successful, telephone spokesmen indicate that use of the battery may be extended to other rural telephone systems and to low-power mobile equipment.

A solar furnace devised by Convair Division, General Dynamics Corp., gives dramatic proof of the potentialities of solar power. This furnace, a parabolic aluminum mirror, focuses the sun's rays on an area the size of a dime.

Temperatures of 8,500 degrees Fahrenheit have been attained—only 1,500 degrees cooler than the surface of the sun, and the highest controlled temperature man has reached. The furnace can melt steel within seconds. Its principal use is in high-temperature metallurgical research and in determining qualities of refractory materials and ceramics.

A similar furnace, designed by Fordham University's Dr. Tibor S. Laszlo, has attained temperatures of approximately 7,000 degrees Fahrenheit and can melt a chunk of granite in three seconds. Dr. Laszlo is now at work on a larger mirror and some mechanical improvements and hopes to achieve a temperature of 10,000 degrees, about that of the sun's surface.

High temperatures are reached so quickly in solar furnaces that upwards of 20 experiments can be made in half an hour.

The U. S. Air Force is perfecting a cadmium sulfide solar generator, consisting of a crystal sheet which, eventually, can provide enough pow-



The Bell Solar Battery, announced last year, is now being used near Americus, Ga., extending rural telephone service

er to operate all the electrical equipment in the average modern house, including lights and heat. Air Force technicians say a sheet four feet by 15 would be large enough to run the house.

General Electric Company has come up with a radio transmitter the size of a cigaret package which uses selenium solar energy converters in place of silicon. The transmitter at present can carry a distance of about 100 feet.

General Motors engineers also have adapted selenium converters for use in photoelectric cells. The power that is thus generated from light operates a small electric motor which propels a model car.

The University of Wisconsin has started a four-year, all-embracing study of solar energy under Dr. Daniels' direction. The project is made possible by a \$250,000 grant from the Rockefeller Foundation. Dr. Daniels hopes to develop solar cookers, solar distillers for the conversion of sea water to fresh, solar refrigerators, solar engines, solar air-conditioning apparatus and solar irrigation pumps. Such equipment, Dr. Daniels points out, would be especially useful in India, Egypt, Mexico and in other arid or semi-arid areas of the world.

Solar cooking devices are by no means big business, but it is interesting to note that about 1,000 aluminum solar cookers are sold in India every month. Cow dung is the principal fuel for cooking in India, but United States and United Nations technicians are hopeful that solar energy eventually will replace this ancient method, thereby returning more fertilizer to the soil and improving agricultural yields.

The Ford Foundation has made a \$45,000 grant to New York University to develop and design more efficient solar stoves for use in India and the Near East.

The Rockefeller Foundation has awarded \$60,000 to the University of California to conduct experiments in the growth of algae as a possible food source for the future. Carnegie Institution and other organizations in past experiments have shown that sunlight can produce 30 tons of algae per acre of water per year, with a 50 per cent protein content and three tons of fat. These figures are far in excess of production of land plants, with their inefficient photosynthesis systems.

These are just a few of the highlights in the current solar energy picture. Other nations, notably the U.S.S.R., France, Italy and Great Britain, also are hard at work on problems of utilizing solar energy.

Soviet scientists, for example, are developing reflectors which produce 100 pounds of steam per hour at a pressure of 100 pounds per square inch. These heaters are being used in the operation of canneries, for distilling water, operating refrigerators and for heating buildings. Other large ovens are being produced to provide 18 tons of steam per hour or 33,000 tons per year. The Russians also are working on stills to recover fresh water from salt and on various heating units for cooking and domestic use, particularly in the arid and partially arid areas of the Soviet

Union, as well as steam generators for home heating and cooking, ice making and other uses.

While many of the technological and engineering problems are slowly but surely being solved, the economics of solar energy utilization continues to present considerable difficulties.

Grants from private foundations and industry, plus government assistance, assure that solar energy research will not lack for aid at the laboratory level and, to a lesser degree, in field applications of a practical nature as well.

END

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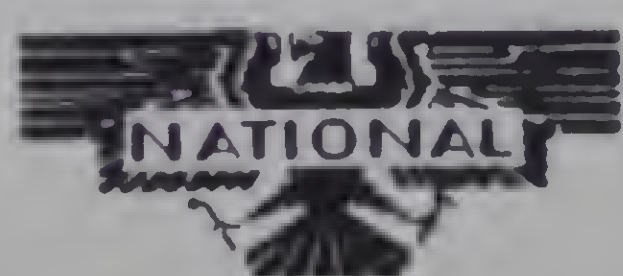
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NORTH AFRICA

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native Arab-Berber population unthinkable. Algerians are citizens of France. (The representation of the native Algerians in the French Parliament, however, is restricted, so that the nationalists charge that Algerians are second-class citizens.)

While Morocco and Tunisia are technically protectorates of France, they have, in effect, been colonies, and have long been considered the gems of France's colonial crown. No French government politically could grant complete independence to Morocco and Tunisia, and abandon the French colonials to Moslem rule. (Any move toward reform in North Africa is attacked as weakness by French conservatives. Premier Mendes-France, also a moderate, was voted out last February by the French Parliament on his move to give more home rule to Tunisia. However, his successor, Premier Faure went ahead with the reform legislation there.)

France has spent billions of dollars and tens of thousands of lives subduing North Africa, colonizing and developing the area, and has been especially proud of her efforts in improving the education, health, and economic standards of the native peoples.

Even today, as in the past, many Frenchmen see in their North African overseas territory—which possesses excellent land for farming and weather conditions akin to those of southern California—a natural outlet for growing home population.

Strategically, control of North Africa increases France's position in the Mediterranean and provides a vital source of military manpower.

Economically, North Africa is an important source of raw materials for France's industries.

What is the United Nations' attitude on the situation?

Since 1951, the Arab states, backed by the Moslem members of the UN and Russia, have unsuccessfully tried to obtain direct intervention by UN in North Africa. France, of course, opposed such a step, and has been backed up by Great Britain and the United States.

In 1952, the UN General Assembly did adopt a resolution calling on France and Morocco to settle their differences by negotiation. The subject of North Africa was raised, with no resultant action, again in 1953, 1954, and—thus far unsuccessfully—in 1955.

Last month, however, although

balked in committee, the Asian-Arab bloc succeeded by a single vote in placing the Algerian issue on the agenda for open UN Assembly debate. France, in reaction, withdrew its delegation from the Assembly.

What is the American government's attitude?

Officially, the United States has to date taken what is tantamount to a hands-off policy.

In recent background memoranda on North Africa, the State Department expressed the official American position as follows:

Algeria: "The United States considers Algeria as an integral part of the French Republic. In the interest of western security objectives, the United States welcomes all constructive steps taken by the French government to assure the internal stability of the area."

Tunisia: "We have the double objective not only of preserving our Mediterranean interests and our relations with France as a leading partner in NATO, but also of maintaining our traditional sympathy for self-government and our relations with the Arab and Asian states. We have therefore sought, in the United Nations and elsewhere, to promote an atmosphere in which France and Tunisia, free from outside interference, could work out solutions as to their outstanding differences which would be voluntary, mutually acceptable, and therefore more durable. The signing of the Franco-Tunisian conventions justifies this attitude on our part. . . ."

Morocco: "The principal objectives of the United States in Morocco are to maintain the various national interests both direct and indirect . . . and to contribute as far as possible to peace and stability. We sympathize with the aspirations of dependent peoples for a greater participation in their management of their own affairs, yet we recognize the importance of French contributions to Morocco and the importance of France, our partner in NATO, of her ties with Morocco.

"Peace, stability, and political development in Morocco are of great importance to the United States and to the West because of our own interests and those of our allies and partners, including both France and the friendly Arab and Asian states."

Unofficially, the United States government is gravely concerned over the explosive threat hanging over North Africa and has been earnestly urging the French government to hasten reforms before it is too late, as happened in the case of French rule in Syria, Lebanon, and in Indochina.—SAM STAVISKY



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SALES BOOST

continued from page 35



per cent of those with incomes from \$4,000-\$7,000, and more than 25 per cent of those with incomes above \$7,000 own two cars.

Even television sales are affected by changes in income. Federal Reserve studies indicate that, in 1952, about 70 per cent more sales were made proportionately to buyers with incomes over \$4,000 than were made to buyers with incomes under \$4,000. In 1953 the ratio was about two to one, and in 1954 a bit more than 1½ to one. The average for the three years was about 1¾ to one.

The story is similar for furniture and other durables whose purchase can be postponed. In 1952 and 1953 purchases of furniture were 60 per cent greater per consumer unit with incomes over \$4,000 than for consumer units with incomes under \$4,000. In 1954 the relative purchases were about 50 per cent greater for the group over \$4,000.

Recreation and travel expenditures are another field in which tremendous potentials are just appearing. Travel to our national parks has risen far past the capacity of the parks to handle. The number of vacation weeks taken in this country has doubled in the past 20 years. Expenditures on foreign travel have more than doubled and expenditures in hotels and motels have about doubled in the past ten years. Outlays for boats have gone up more than 60 per cent.

Such developments are possible because of greater incomes combined with greater leisure. The leisure market may offer the greatest potential for growth of any major industry.

This will not be a new development but rather a continuation of a trend that has been under way for some time. The types of consumer expenditures which have grown most in the past 15 years have tended to be those connected with recreation and leisure. All consumer expenditures increased about 182 per cent from 1941 to 1954, but expenditures at restaurants and bars just about doubled. Outlays for toys and sport goods went up nearly 250 per cent, and outlays for television and radios went up more than 250 per cent. Outlays on tires and auto parts went up about 260 per cent.

The things that people had wanted but could not afford in quantity have begun to sell.

Even higher education shows the effect of this development. Expenditures on higher education in 1954 were about 250 per cent greater than in 1941. This represented an increase of about 24 per cent in the proportion of total consumer outlays going to education. More people want more education, and can pay for it.

This increased ability to pay for what is wanted is resulting in increased expenditures in many cultural areas besides schools, as for books, for music, for art.

We can afford culture, and we find we like it. Concerts, hi-fi phonographs, art shows all point the way to the vast new developments for our minds and personalities as well as our bodies.

On the other hand, some industries do not benefit proportionately in all respects from upward shifts in income. Agriculture is an obvious illustration. Food tastes shift as income rises, but the number of calories eaten may not change much. Wives buy less bread and more fruits and vegetables, less sugar and more meat. Per capita consumption of cereal products is 25 per cent less today than before World War I, but per capita consumption of fruits and vegetables is up 25 per cent. Per capita sugar consumption has dropped from 104 pounds in 1925 to about 95 pounds today, but meat, fish, and poultry consumption has risen from 96 pounds to 107—about a pound for pound shift.

Consumption of fiber per person has risen from nearly 31 pounds in 1925 to more than 41 pounds now.

The laws drawn up to protect agriculture were drawn originally to protect the purchasing power of crops produced before World War I, when nonfarm incomes were much lower in real purchasing power than they are today. As incomes rose, per capita consumption of wheat—largely in the form of bread—declined, so the government was forced to step in to support the production of quantities no longer needed. The longer farmers continue to produce crops bought by the lower-income families of 1910-1914 rather than the crops wanted by the higher-income families of 1955, the harder the final adjustment will have to be.

Mass urban transportation, such as street-car and bus traffic, is another illustration of the decline in an established market as a result of increased incomes. Even here alert managers are adapting their services to this trend.

In Cleveland, for instance, home pick-up bus service, with reserved seats, is available on an express basis. This provides the advantage of the car pool, without parking or car maintenance problems.

Even mass production items can be kept abreast of changing incomes with profit to the public and to business. Only the business that fails to keep abreast of rising standards of living needs to suffer because of the tremendous growth in the middle-income bracket. The business, and its employees, which keep abreast of this new market have a rosy future ahead.

—ROBINSON NEWCOMB

Dr. Robinson Newcomb has had long experience as economic adviser to private firms and government agencies, including the Council of Economic Advisers, Department of Commerce and the Office of Defense Mobilization.

REPRINTS AVAILABLE

The articles, "RISING INCOMES MEAN BIGGER MARKETS," "SELLING WILL BECOME MARKETING," and "HERE'S HOW STORES WILL FACE IT," have been combined in a reprint which may be obtained for 20 cents a copy or \$14 per 100 including postage.

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2 Selling will become marketing

OUR MASS MARKET as much as our mass production underlies the American economic miracle, with its high standards of living, its rapid expansion and its full employment. To get the customer to buy is central to the success of any business and to the prosperity of our economy.

But more and more thoughtful businessmen are beginning to wonder whether our concern with selling and with the salesman is not in large measure a result of our neglect of marketing; whether indeed we do not expect from the sales force and its selling effort results which only marketing can deliver. More and more businesses are, as a result, developing systematic marketing efforts and organized marketing organizations.

One example is the General Electric Company where the former sales vice president is now called a marketing vice president, the former sales managers have become marketing managers, and where selling, though still important, is only one function among many others that a new marketing organization is expected to discharge.

The salesman is, so to speak, the combat soldier of business. But combat troops are not much good if they attack the wrong enemy or if they are 2,000 miles from the front where they are needed. And giving the combat soldier the right equipment and the right supplies for his job, when and where they are needed, will multiply his effectiveness many times over. Sending him out poorly equipped and undersupplied may destroy his effectiveness.

Marketing, as we are coming to understand the term, is the organized effort of a business to make sure that its sales efforts go after the right customer and are directed at the right market; to make sure that it applies the right sales strategy and uses its sales efforts where the sales are. Finally, marketing is the organized effort to get the sales force the best equipment at the place and at the time at which it is needed.

Most businesses already do a good deal of marketing—whether they use the term or not. But few of them do an organized job. Even fewer get the most out of the marketing work they are doing.

Here are the main things which companies that are doing a successful marketing job consider essential:

Research, market research, customer research and sales forecasting. This is the area of marketing that has grown the fastest in American business during the past 25 years.

Product planning and testing. These are the newest areas of marketing and the ones where we so far mostly know what should be done rather than how it could be done. A great many marketing people, in



pay? Is there any good marketing reason why two different kinds of customers should be offered two different models of the same product, or can the design be unified for both markets, thus making possible real cuts in cost? Product planning, in other words, is the intelligence service of marketing and of designing, the organization that brings together all the knowledge about the customer's needs and the market demand, sifts them, appraises them, evaluates them and then reports the conclusions to the men who are responsible for designing and turning out the product.

Product testing is the reconnaissance force of the business. It is charged with testing out a new product or changes in a product, with finding out where the market for this new product is likely to be and what it demands of the product. It also tries to find out how the product should be introduced, how it should be advertised, how it should be sold and serviced. Even the best product testing efforts will not eliminate entirely the risk that introducing a new product or changing a well established old product always entails. But the risk can be greatly cut down. There is real need for this. Figures indicate that only two out of every ten new products introduced—even by the most powerful and most experienced large corporations—really succeed or are thoroughly thought



all kinds of businesses, feel strongly that these may be, in the long run, the most important areas of marketing.

Product planning does not try to design a new product. This is the job of the engineer, the chemist or the designer—or in an insurance company, for instance, of the actuary. But product planning tries to bring to the designers the knowledge of marketing needs and marketing opportunities. What products does the customer want? What products does the customer need? What does the product have to do for the customer? How much can he afford to

SALES BOOST



continued

through and worked out to the point where they satisfy market needs.

Pricing. "Nothing," the president of a large company said recently, "so directly influences our sales volume and our profit as the pricing of our product. Yet we'd be better off using a crystal ball for our pricing decisions than to use the yardsticks we now have. We really know nothing about what prices we ought to charge, what prices we ought to design our product for and, above all, what the price differentials between our different product lines should be. We either just follow the competition in the hope that somebody else knows better than we do what our price should be, or we take our production costs hoping that the market will accept them as a good foundation. Or we go just by tradition or hunch."

Perhaps this is an exaggeration—but only a slight one. Pricing is really the darkest Africa of management. Here we operate by hunch, by looking over our shoulders at the competitor or by just adding a fixed margin on what we think are our costs of production in the hope that the market will accept our figures. Of course, if the product is overpriced, we soon find out though rarely soon enough to prevent damage. But many competent people, businessmen as well as economists, believe that a great many products today are underpriced simply for lack of knowledge as to what the price should be. And there is even less doubt that few businesses have even studied the relationship between their prices, their sales volume, their costs and their profit—let alone have aligned these four pillars of their business success with each other.

Sales strategy and selection of distribution channels. Should a business sell to jobbers or directly to retailers? Or should it do both? Should it try to sell by mail or through salesmen? Should it aim at the luxury market and at building

an exclusive name for itself? Or should it aim at the mass market and perhaps not even brand its goods but sell them to wholesalers who distribute under their own brand names? Should it have franchised dealers and give the franchise only to a few people in each area? Or should it sell to all who are willing and able to pay the price?

All these are familiar questions. The right answers are different for each industry and each company. Yet the American distributive system has always changed rapidly and it has perhaps never changed quite as fast as today. To determine what a company's sales strategy and distributive channels should be, to develop them, and to determine when a new sales strategy or different channel is needed, is therefore a major problem facing business today.

Advertising and sales promotion.

This is another familiar category. But advertising, especially advertising beyond a small local neighborhood, is becoming so expensive that a business must know both whether it spends the right amount on its advertising and sales promotion—and too much can be as damaging as too little—and whether it gets the most for its money.

There is one crucial question which few businesses know even how to ask, let alone how to answer. That is: When should one advertise to get results at the time at which they are



Product testing reduces risks with new product

needed? Most advertising budgets are determined simply by setting aside a fixed percentage of current sales. It may, however, be much more intelligent for, let us say a manufacturer of pumps, to increase his advertising when sales are fairly low and to decrease it—or at least not to increase it further—when sales are high. Another difficult and important question which few businesses would feel capable of answering with confidence is: To whom should the advertising be directed and where should sales promotion take place?

A large department store which

tried to answer this question by hunch shows how wrong such a method can be. This store tried to promote the lagging sales of men's wear by displaying men's wear in its women's fashion department. The thought was that the women buy most of the apparel their husbands wear. Hence displaying men's suits, shirts and ties amidst the women's dresses, blouses and skirts would induce them to go to the men's wear department and pick out a tie or a shirt for their husbands. The result, however, was that the women not only did not buy more men's wear but bought much less women's wear as well. They apparently felt that mixing men's wear with women's fashion goods cheapened and coarsened the entire atmosphere of the store. Yet another store in a neighboring city used the same sales-promotion approach successfully. But it catered to a much lower income group which of necessity calculated men's wear purchases in the household budget—with the wife usually deciding both when and what to buy.

Customer service. This is important not only where a product requires actual servicing in the customer's home, office or plant but also where the product apparently requires no service. The customer never buys a product—unless he is a dealer aiming to sell it again. He buys what the product will do for him. Therefore the customer always buys service. It is important to make sure that the product actually gives this service, though there are many ways in which it can do that.

Selling, finally, while obviously of vital importance, is only one phase of the marketing effort.

The first reaction of many businessmen—when they hear talk about the need for marketing is to say: "Maybe General Electric needs this and maybe General Electric can afford this, but we neither need it, nor can we afford it. Our selling problems are simple and anyway, how can we possibly add to selling costs which are already way too high?"

But there are a few things which any business, even the smallest, can do; a few things which in any business are likely to pay substantial dividends. Five fairly simple things are possible in practically every business and profitable in most of them.

1. The first one—and one which almost any business can do without running into additional costs or effort—is to make a price-cost-volume-profit analysis of its sales effort. What this might be, and what it might do, is shown by an example which, though somewhat simplified,

is taken from the experience of a medium-sized manufacturing company.

The company had four major products. Product A sold at \$1.00 each. It cost 87 cents to produce it and six cents to sell it to distributors. The company sold annually about 2,000,000 pieces making total sales of Product A of \$2,000,000 and total profit (before any overhead allocation) of \$140,000.

Product B, an improved version of Product A, was priced at \$1.50. Manufacturing cost was \$1.02. Selling costs were eight cents. Volume was 500,000 pieces a year, making total sales of \$750,000 and gross profits of \$200,000.

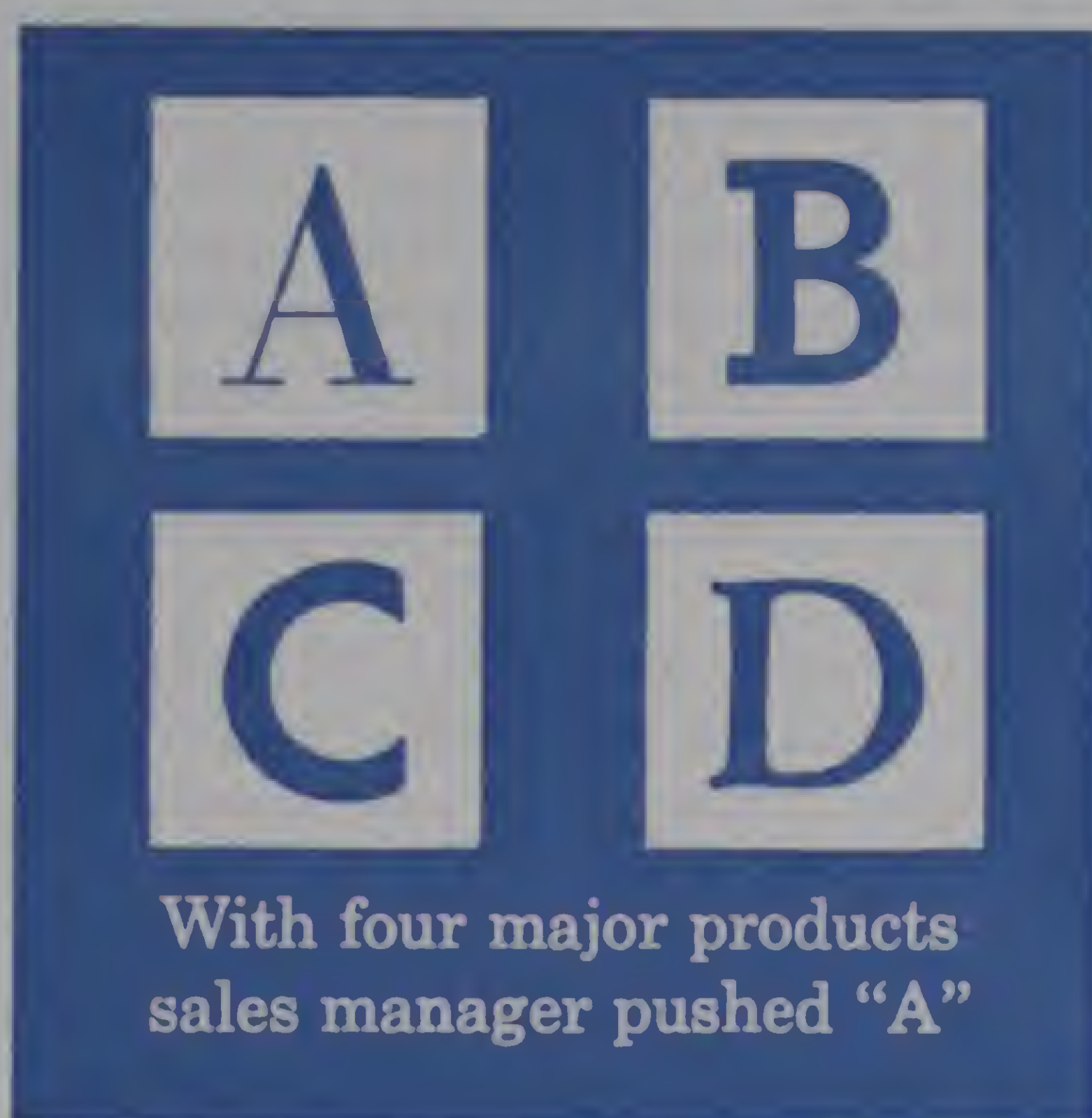
Product C was a different product which, though based on the same engineering principles, served different uses. It was priced at \$1.75, cost \$1.40 to produce and 14 cents to distribute; 500,000 pieces were sold each year with total sales of \$875,000. Total gross profit before overhead was \$105,000.

Product D, an improved version of Product C, sold for \$2.00, cost \$1.58 to produce and 19 cents to distribute; 300,000 pieces were sold, making total sales per year of \$600,000 and a gross profit of \$69,000. Altogether the company sold about \$4,225,000 worth of goods a year and made gross profit before overhead of just a little more than \$500,000. After overhead of \$240,000 only \$260,000—less than seven per cent of sales—remained before taxes.

The first thing this analysis revealed was that the sales efforts were not directed where the company would stand to profit the most. The sales manager, in his desire to build volume, pushed his men to sell more of Product A, the one easiest to sell and the one in which the company

had a position of leadership. He was only slightly less concerned with pushing Product D where the gross profit margin, before sales costs and overhead allocation, looked so much better than it did on Product C, and where any improvements in sales would seem to promise such great improvement in total sales volume.

Actually the product that needed pushing the most, the product on which the company stood to gain the most from any increase in sales, was



Product B. The salesmen would have to sell two pieces of Product A to get the increase in profit which an additional sale of one piece of Product B would have produced. In fact it is doubtful whether the company would have benefited at all from any increase in the sales of Product A. For with a margin between selling price and manufacturing cost of only 13 per cent and with selling costs of six per cent, this product actually at best broke even, if overhead costs are taken into account. Product B, on the other hand, had almost double the margin.

This analysis also brought out the question whether there was any point in trying to push both C and

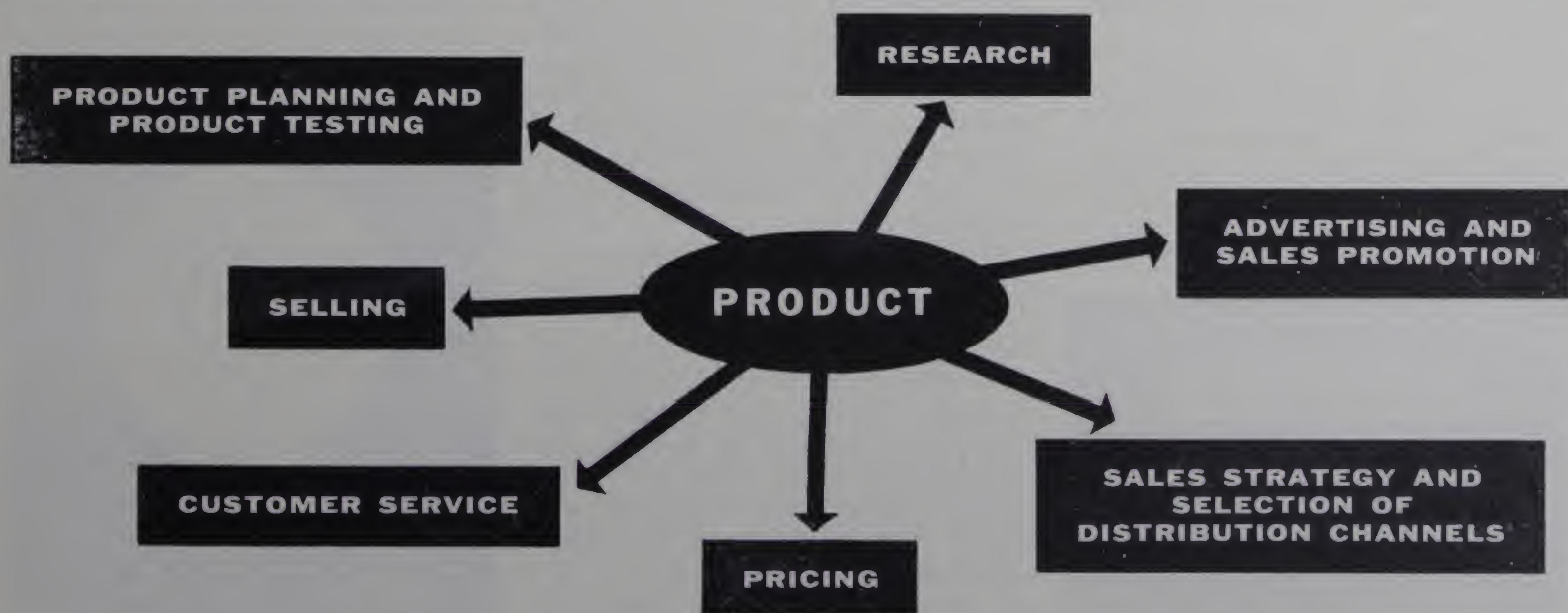
D. Was the company actually competing with itself trying to sell both? Was there any point in trying to sell an improved version if the profit on it was actually no larger, in view of the higher sales and distribution expenses? At the least it would seem logical to price Product D a good deal higher—perhaps at \$2.25—to make up for the high distribution cost and the high overhead which low volume entailed. Or, if this should prove impractical, Product D might be dropped and real sales effort be put behind Product C, especially if, as the small difference in price indicated, there was not enough difference in performance to justify a higher price.

Another conclusion was that, while no major effort should be made to push Product A, improvements were needed in manufacturing to cut costs and make this company staple profitable again.

Finally, this simple analysis raised two important questions. First, where should the company's advertising and sales promotion effort go? Should it go toward pushing Product A, or for pushing those products that promised the greatest profit if successful, that is, B and C? Another question—a product planning question rather than a sales strategy question—arose in respect to product design.

Should the company concentrate its small and limited engineering effort on changing the design of Product A to make lower manufacturing costs possible? Should it concentrate on cutting manufacturing costs for Product D—which also obviously were high in relation to price? Or should it, which in the end seemed the most intelligent answer, concentrate on merging C and D into a product which, for the manufactur-

MARKETING—AN ORGANIZED EFFORT



SALES BOOST



continued

ing costs of C, would give the performance of D and thereby justify a higher price than C was getting at the time?

Obviously much more information than such a summary tabulation can give is needed to answer these questions. And the answers usually will be hotly disputed. Final decision will be on the basis of judgment rather



than on the basis of figures. Yet such an analysis, despite its simplicity, is a diagnostic tool of great impact and immediate usefulness. Even in the simplest business, experience has shown, it will bring up possibilities for improvement which, though they seem obvious after they have been noticed, would otherwise have not been noticed at all.

2. Not so simple but equally productive is an analysis of the sales strategy of the business. What distribution channels do we use? What distribution channels do our competitors use? What distribution channels do we not use—and are we right in not using them? On what basis do we organize our sales efforts? Are we aiming, for instance, at getting the cream with the minimum cost? Or are we aiming at mass penetration of the market and at getting the maximum percentage of the potential business regardless of selling cost?

For different businesses different answers will be right. Usually the people who run the business, and

especially the people who run the sales end of the business, have a pretty good idea what the answers should be. But without asking themselves the questions they are likely to go on doing things which, if they would only think about them, they would want to change or to improve.

A simple illustration is the case of a company that publishes a salesman training program for business. In its own publication the company stressed the need to think through one's sales strategy. But it had never applied its own medicine to its own business. Yet while sales were good profit began to do poorly. Then the company looked at its own sales strategy to find that it had concentrated 80 per cent of its sales effort on small businesses, in other words aimed at mass penetration of the market.

However, only one out of every 25 small businesses visited ever bought. Most of the sales were made only after eight or ten calls. Worse still, almost no repeat orders came from small business even though the small business customer asked for a great deal of help in using the material and in presenting it to his own salesmen.

By contrast companies with 2,000 or more employees either bought on the first or second call or made it clear immediately that they were not interested. Actually one out of every ten such companies called upon bought; and it took only 25 calls on large companies to make a sale whereas it took up to 150 calls on small companies to make one. The cost of a call is the same whether the customer is large or small. More important, one out of every three large customers gave a repeat order without an additional sales call.

A change in the sales strategy which eliminated calls on any potential customer with fewer than 1,500 or 2,000 employees enabled the company to cut its sales costs by almost 70 per cent. But volume or sales did not fall at all—because the large company also gives a bigger order. Repeat sales—on which a business like this actually makes its profit—increased fourfold within 12 months and now require only the minimum sales effort.

This may be considered an extreme example—though I have heard of quite a few like it. But, every sales manager knows that one can either try to reach a specific audience, or one can try to reach everybody. One cannot, however, try successfully to do both—and yet, unless sales strategy is carefully analyzed, this is exactly what a business is likely to try to do.

3. Another simple and productive

approach to marketing which even the smallest business can successfully apply, is to ask: What are the customers' unsatisfied wants, wants which neither our product nor that of any competitor really satisfies. The greatest chance to obtain profitable sales in volume lies in the satisfaction of such wants.

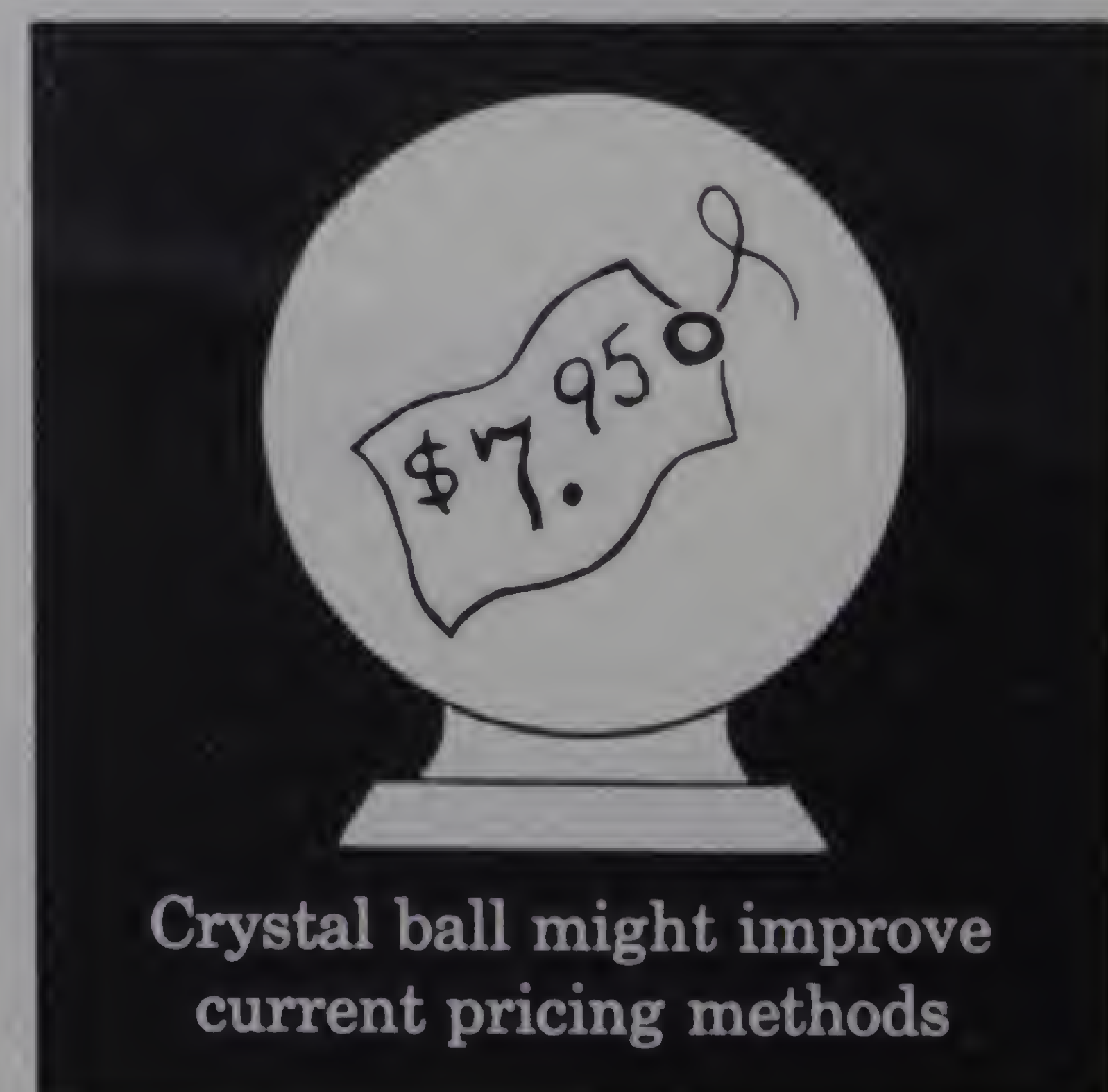
A small manufacturer of fuse boxes, safety switches, circuit breakers, mainly for homes, recently scored a nationwide coup when he introduced a better wiring kit for the use of his customers. There is really nothing in this kit that has not been in his line before.

This kit was the result of asking: What is it our customer, the electrical contractor, needs and wants that he does not get? The answer was simple. The greatest potential business in this field lies in strengthening electric wiring and controls to make homes—most of them at least 20 years old—capable of handling all the new appliances that have come into use since they were built. Yet the contractor had nothing available for this job. In every case he had to figure out what was needed and then had to get together, often from a variety of manufacturers, the pieces he needed for the job. Putting these pieces together into one kit supplied one of the customer's unsatisfied wants—practically without expense other than that of some hard and honest thinking.

4. A related question is: What does our customer consider value to be and how do we give him the greatest value for his money?

In many cases the answer will be "low price." But even price is not as simple as it sounds, as the following examples show clearly.

This is the story of a manufacturer of plumbing equipment which is bought by plumbing contractors who then install it in buildings. The plumbing contractor is, like every contractor, extremely price-conscious. He will buy the product that will enable him to quote the lowest price for a job. But this does not



necessarily mean the lowest-priced equipment. Two factors enter into the contractor's price to his customer, the price of equipment and the price of the labor used to install it. And the contractor, customarily, makes his profit primarily on the price of equipment which he passes on to the customer with a mark-up. The cost of the labor he employs is usually passed on with little, if any, mark-up.



Therefore lowest price to the contractor really means that equipment that gives him the lowest price to the ultimate customer, the builder or home owner, with the lowest labor cost ingredient. Products that enable him to cut installation time—and installation skill—can therefore be a good deal more expensive in this day of high wages and scarcity of skilled help. By focusing on the design of equipment that requires little time for installation and even less skill, the manufacturer has been able to increase his market greatly, even though his prices intentionally are somewhat above those of his competitors. In addition to the contractor this manufacturer has been able to tap the new, rich "do it yourself" market.

5. The final simple but effective marketing task which even the small business can carry out, is to think through the service expectations of its customers and the service promise of its product. This service may be built into the product; and this may be the only way to get it. The service may be given in helping the customer use the product or adapt it to his needs. Finally there is the service rendered after the sale, the service with which the housewife is most familiar and the absence of which she resents so much.


Every business can therefore ask: What kind of service do our customers expect? How good does it have to be to live up to their expectations? Do we actually give it or not?

Here are two examples of success-

ful answers. One manufacturer of dictating machines is able to sell his machines at a high price, both absolutely and by comparison with the prices of competitive products. He bases his sales appeal on the promise that he will keep the machine going no matter what happens and at no extra cost to the buyer. He figures that nothing is as annoying to a businessman as to sit down to dictate, only to find that the machine is out of order. Since the sales appeal of any dictating machine is precisely that the owner can dictate in a hotel room, at home after dinner or while his secretary does other chores, the manufacturer decided that low price was not as important as the guarantee that the machine would always be in working order or would be repaired within half an hour or an hour after a call for help.

Conversely, a leading manufacturer of X-ray machines for medical practitioners owes his position largely to a realization, 30 years ago or so, that his major service task was to guarantee that no one would be harmed by his machines. It is of course annoying if an X-ray machine goes out of order. But it is rarely a major problem. Except in small communities there are a good many X-ray machines in every town. If the machine in one doctor's office goes out of order the doctor can have his patient X-rayed at the hospital. Or he can, without too much trouble, use the X-ray equipment of a colleague. But an X-ray machine, with its radiation, is potentially a dangerous thing. Doctor, nurse, technician and patient must be absolutely certain that the safe level of radiation will not be exceeded. The manufacturer does keep spare machines all over the country which can be lent to a doctor in an emergency. Otherwise he has made no special effort to have ailing machines serviced; it may be a week or more before one of the service men gets around to the repair job. But every machine is built in such a manner that it will cease to function the moment the safety level of radiation is exceeded by the smallest amount. In other words service in a medical X-ray machine consists in building in breakdowns.

These five things, which even the small business can do fairly easily and effectively, are of course not what a large company today means when it talks of a systematic marketing effort. Yet they do come to grips with practically every major effort of marketing: with the job of finding out systematic and reliable facts about market, customer and sales volume; with product planning; with pricing; with sales strategy; with ad-



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SALES BOOST



continued

vertising and sales promotion; and with customer service.

Together, in other words, they constitute a package—which will at least show a business whether it does a reasonably good marketing job and will enable it to do a good deal to supply its sales force with the direction, the equipment and the marketing strategies needed to make sales efforts pay off.

But there is one more thing to be done. Even if every single part of the marketing job is done and done well, the question still remains: Do these efforts hang together and is the sales force really using them to yield more profitable and cheaper selling?

First the head of a business might ask his sales manager to set down the objectives of the sales organization. Next he should ask for the assumptions on which the sales efforts are based. Is the sales effort, for instance, based on the assumption that to get more volume is always good in itself? Is it based on the assumption that more volume will automatically mean lower sales costs—and does the company's experience bear out this rather common (and usually dubious) assumption? Is the sales effort based on the assumption that sales volume is directly proportionate to the number of calls made by the salesmen? Or is there reason to believe that, beyond a certain number of calls on any given customer, the salesman is wasting his time and that of the customer?

In other words what are the guidelines which the sales manager himself applies to his marketing effort?

Finally—the most important and usually the most difficult question—the sales manager should outline who is responsible for each piece of the marketing job and what other responsibilities the same man carries, that is, how much of his time and effort he can reasonably be expected to give to marketing.

This is, frankly, a painful thing to do—searching one's own conscience usually is. But wherever it

has been used, it has been found—practically without exception—that even in companies that are marketing-conscious, important marketing areas are slighted. Basic marketing information, information that could easily be gotten, simply does not exist; marketing and selling efforts are based on contradictory and conflicting objectives and on inconsistent assumptions; half measures are only too common. Finally, responsibility for the marketing effort is diluted, spread over far too many people, uncoordinated and often left hanging in the air.

A good many people have lately been talking of push-button selling and have made it appear that marketing is a way of getting goods and services distributed without having to use selling and salesmen. There are several examples of such push-button selling—the supermarket or the vending machine for instance.

But there is little doubt that for a long time to come—probably forever—it will take people to sell goods and services and it will take selling to make the customer buy. Marketing is not an attempt to make the salesman superfluous and to make selling automatic. On the contrary it is primarily an attempt to strengthen the salesman and to make his selling effort more effective.

We need such attempts urgently in every business. In the first place the great technological changes today, such as automation, all de-



pend for their success on our ability to establish both stable and expanding markets. Second, one of the biggest opportunities for economic advance now probably lies in reducing distribution costs. There are cost-cutting possibilities in the physical distribution of goods, their movement from plant to warehouse, and from warehouse to distributor and from distributor to customer; but the greatest opportunities for cutting distribution costs lie in reducing sell-

ing costs—that is, in more effective, more planned, more purposeful selling effort. Finally American business will have to learn to sell a much larger volume of goods and services with the same—or perhaps even with a smaller—number of sales people. We anticipate a doubling of national production within the next 20 years but our labor force will grow only a little.

We will not therefore be able to rely on additional people for the additional selling effort needed. Instead, we will have to learn how to increase—perhaps to double—the effectiveness of the sales effort of the individual salesman. In light of this fact alone the belief that all we need are more salesmen is somehow



reminiscent of that old joke about the mountain tribe in the Balkans who made a living by stealing each other's sheep.

An individual business might indeed be able to increase its sales force—though only at great increase in cost. The American economy as a whole cannot hope to do so. Even if the individual business can solve its problems by harder selling, the American economy as a whole will have to solve them through marketing.

For the individual business, too, the cheapest and most successful—probably the only successful—way to solve the selling problem is to give some of the time, attention and money now spent on selling to the marketing tasks, the tasks of finding, developing and servicing market and customers, on the accomplishment of which the effectiveness and performance of sales force and salesman ultimately depends.

—PETER F. DRUCKER

Peter F. Drucker is Professor of Management in New York University's Graduate School of Business and an adviser on business policy and management to several large corporations. He has written numerous articles and books in the field of economics.

3 Here's how stores will face it

START PLANNING now for 1980.

Changes that will affect the future of retailing already are evident. Evident, too, is the fact that retail selling, particularly downtown, is part of the vast pattern of city life. The future of retailing is, therefore, closely tied to the future of the city.

In 1980 cheaper power will lead to many time-saving and labor-saving devices which are still uneconomic today. Power units will occupy far less space than their present counterparts, opening up many new and improved applications.

Some of these applications will be in wholesaling and retailing which so far have responded to mechanization in a lesser degree than manufacturing.

Much is being made of automation as the next step in reducing the manpower required in a plant, and, conversely, stepping up the productivity ratios for the men who remain. Doubtless automation will increase the abundance of consumer goods

not compete with the vacuum cleaner plant which can use the ex-maid on the assembly line. When the housewife's time becomes too valuable to push a vacuum sweeper, a less laborious and more automatic method of cleaning will be found. Bringing the product to a more nearly finished state before it reaches the consumer also takes labor out of the home. This process has gone a long way and can go still further in both food preparation and dressmaking which once were major household industries.

As labor is taken out of the house, further comforts and luxuries will be put in. Summer air conditioning will become as commonplace as winter heating. Forms of entertainment will be improved and multiplied. The drudgery of child care will be partially alleviated. The hazards of fire and of household accidents will be greatly reduced. Medical care will be regular and directed more at prevention than

use for leisure will be occupied with avocations—sports, hobbies, self-education and social and religious responsibilities. All of these activities will require an expanding variety of products. The increasing expertness of the devotees in each field will generate still further pressure for product improvement and differentiation.

Consumers will be better educated in 1980. Of the adult population 11 per cent will have finished college and 65 per cent, high school, or double the percentage at the present time. Most of those who have not the interest or capacity for college education will have had some specialized training beyond high school. Girls will be trained more intensively for homemaking, especially in areas of knowledge which will make them better shoppers.

In other words, home economics will actually be economics for the home rather than training in obsolescent household arts. The course will include some knowledge of the mechanical principles exemplified in household appliances as background both for shopping and for more effective use. The manual arts training for boys will emphasize the kind of repair jobs they will face in their homes rather than handicrafts they may never have a chance to practice.

The real purchasing power of the average family will be more than doubled by 1980. There will be less variation because lower paid occupations of today will continue to improve at a faster rate than those at the top. With less distinction in wealth, differences in talent and character will be more in evidence and play a greater part in social leadership, but there will still be leaders of consumption with the social function of projecting a way of life to which others may aspire. The level of aspiration should embrace a broader cultural content than today but it will still take goods to implement it. Leveling up of life and opportunity as among sections of the



potentially available. To study the future of retailing we must first consider what kinds of goods these will be and what kind of consumers will be buying them.

The improvement of present appliances or the invention of others not yet imagined will take more and more labor out of the home. Floors no longer will be swept by a maid with a broom even in the most prosperous of homes. The home can-

cure. The family psychiatrist may become almost as common as the family doctor. Many households will make use of such outside services as accounting. Families will still have problems but they will be the problems of the rich rather than the poor, since nearly everyone will be rich by the standards of 1880.

The problem of leisure will loom large in 1980. Those who rise to the challenge of finding a constructive

SALES BOOST



continued

country will cause people to be more settled in their home communities simply because there will be less occasion to move.

The city of the future

THE MODERN city has been sick of many ailments. It has suffered from dirt, smoke, noise, epidemic, traffic congestion, crime, political corruption, residential blight and plain ugliness. Some say that its present form should be broken down into a number of self-contained cells which merely lie adjacent to each other. Another proposal is that future development should be concentrated along the highways which connect existing cities until a web-like pattern emerges with open country in between urban strips. These proposals overlook a law of land economics—every concentration of population has a center of gravity and certain activities of the population will always tend to gravitate toward that center.

So the nucleated city will survive simply because man has no alternative but to make it work.

The future city will still have subcenters and even neighborhood stores. The stores in the subcenters will be smaller scale replicas of the two types of stores found downtown. Something will be sacrificed in breadth and depth of assortment for greater convenience. The old terms of convenience goods, shopping goods, and specialty goods no longer apply so much to types of goods as types of assortments. The character of the assortment varies with the location of the store and the type of customer or interest it is serving.

Branch department stores and subcenter specialty stores can be very good units indeed. They will continue to enjoy relatively rapid growth for some years. They can never really displace the major downtown units unless big cities fall apart through failure to solve such problems as traffic congestion.

City planning must make some guesses about the future because it

cannot be effective on a hand to mouth basis. It must attempt to visualize conditions at least a quarter of a century ahead; to judge whether the population of the surrounding region and the city will still be growing or will have leveled off; what lines of industrial development will predominate; and the prospective importance of administrative, educational and institutional activities. Experts may differ as to what the future of the city should be, but this vision of the future should be subjected to open and continuous discussion. In fact, by 1980 citizens may be so enlightened that mayoralty

campaigns will be fought out along these lines rather than in terms of national parties. What is offered here is a tentative set of guesses for major cities which would, of course, have to be adapted to local topography and special conditions in each case.

Urban activities consist essentially of movements of information, goods, and people. The movement of information has been speeded up and mechanized to an amazing extent since the invention of the telegraph, and the process is still going on.

The processing and storage of information has assumed momentous proportions, accelerated by such in-



**Tomorrow's city will be designed
for growth and convenience**



ventions as microfilm and electronic computers. The center of the city should have available all information which can reasonably affect any of the ordinary transactions of commerce, including consumer purchases. Not much of this information would have to be processed in the central city but it should be available there with push-button facility.

This means that one or several electronic question answerers with many times greater capacity than the largest units now in existence should be available to the public. These master machines would be housed in an information tower at the heart of the city. They would give information not only in terms of letters and figures but in pictures, sounds, and smells. If, for example, the shopper wanted to know what the bridesmaids wore at a certain fashionable wedding the year before, the publicity and photographs, if any, would be on file in microfilm and readily available for viewing.

There are some things that the answer master could not and would not do. It would not plug the wares of any one store. It would not answer questions about the future. It would give no judgments as to whether any particular goods, services, or actions were appropriate for the person making the inquiry.

Goods can compete for a place in the center of the city but within strict limitations. There is no longer a place for the processing or storage of goods in the central district. Factories and warehouses have moved steadily toward the periphery where they can get the space for one-story operation which they could not afford downtown. The goods which belong in the center are goods which are consumed or used on the premises such as food, office supplies, goods which the purchaser can carry away and samples used for display and demonstration.

People should be given first consideration in the center of the city. The place where many people spend most of their waking hours should be quiet, relaxed and provide maximum facilities for effective interchange between persons. Face to face transactions are the final essence of urban activity. They should not be displaced from the center by allowing this area to become progressively uninhabitable. The same is true for retail transactions in lines of goods or types of stores with a city-wide appeal.

Surrounding the trade and service center would be a residential ring which would be the most densely populated portion of any city. Blighted areas make up much of this

area today. Relieved of some of the traffic congestion and the noise and odors created by goods handling and storage this ring could again be a desirable one to live in. Apartment houses and small homes in a central location could give families the greatest amount of housing utility for the money.

Beyond the residential ring would be a narrower ring for institutional and recreational use. Here would be located museums, universities, hospitals, auditoriums and playgrounds, although such institutions would not be restricted to this ring. The idea of this ring is to provide easy access and ample parking for the type of place which people visit occasionally and often in groups. This is in contrast to the downtown trade and service center which workers and shoppers visit daily or regularly and where the parking problem for private automobiles is insoluble. Municipal government buildings would also be placed in this institutional and recreational ring except for the mayor's office and such other units as demand the prestige or the high degree of access afforded downtown.

The remainder of the urban area beyond the ring would be split into wedges with the large end continuing indefinitely into the surrounding country. Eight wedges are shown in the chart and are alternately marked "Residential" and "Commercial-Industrial." Something like this is believed to be a superior pattern to one of zoning one side of the whole area for industry and the other for residential. Not all industry belongs together or makes agreeable neighbors. Noise, smoke, dirt, and odor can now be completely eliminated from some types of plants and their presence need not depreciate the value of nearby residential areas. Industries which necessarily generate dust and smell should be located on the side of the city where the prevailing wind will carry these things away.

The proposed functional plan is made up of five kinds of elements. A center, two kinds of rings and two kinds of wedges. This pattern should help minimize traffic congestion. There are residential areas close to each industrial area as well as to the downtown business district. People living in the outlying residential areas and working downtown would tend to use public transportation because of the restrictions on personal automobiles in the center. People living in the inner residential ring and working in an industrial plant would in many cases use public transportation in the other direction. The public transportation lines would thus have a more equal two-

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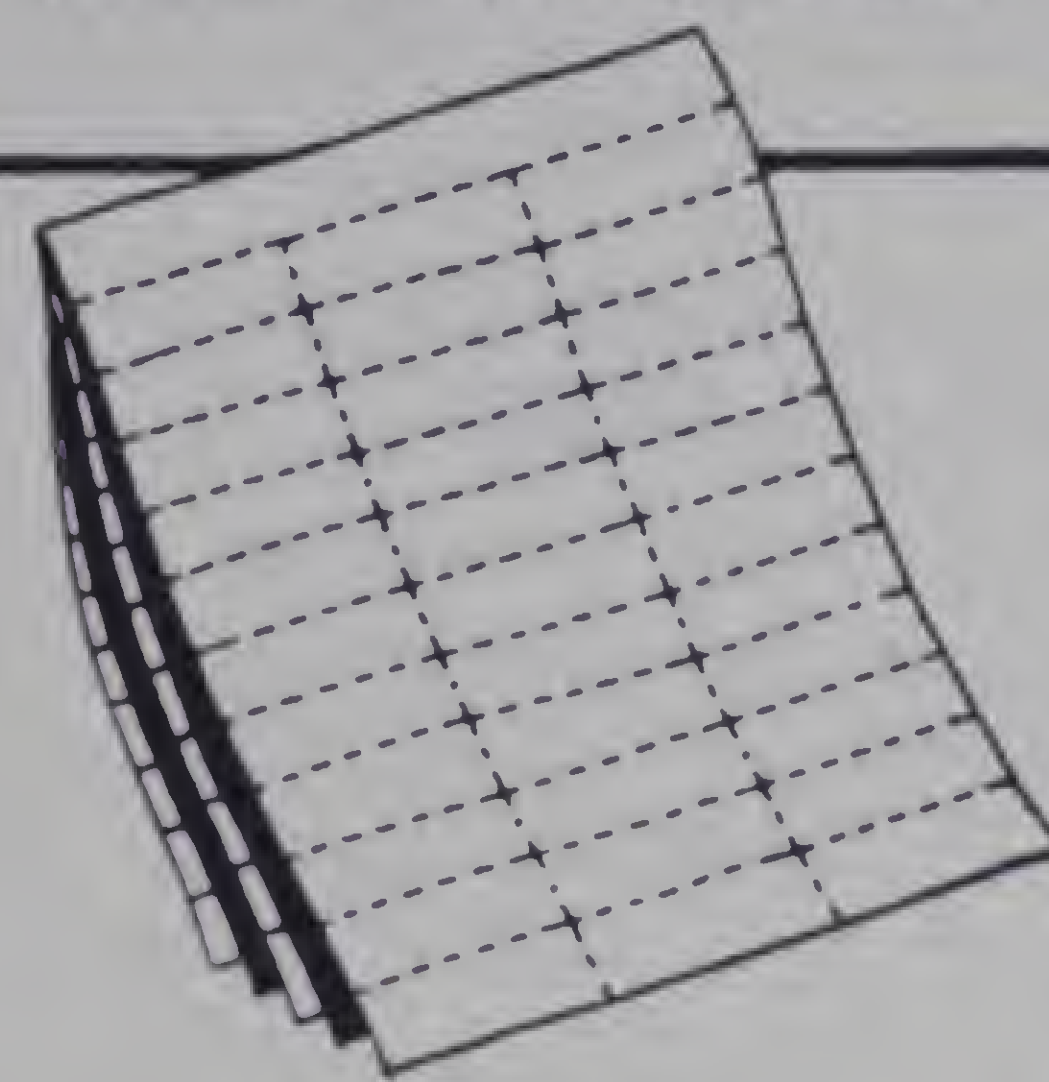
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SALES BOOST



continued

way load both morning and evening which would contribute to operating efficiency.

The potentialities for continued growth will lie essentially in three directions: geographical extension at the periphery, more intensive utilization in the center, and selective decentralization of downtown activities. This third possibility is particularly important with respect to trade.

The central business district of 1980

DOWNTOWN shopping facilities will be grouped in the central business district. All surface vehicles would be barred from the area so that it would be safe and convenient to move anywhere on foot. Many buildings would be adjacent to vehicular tunnels used by the public transportation buses. Delivery trucks could use the tunnels with some limitation as to hours. Taxis and a few chauffeur driven cars with special licenses might also be allowed to unload in the tunnels but not to park for the day. The tunnels would also be open to emergency vehicles.

Movement on the surface—except for pedestrians—would be by some form of transportation presenting the least possible obstacle to pedestrian movement. The chart of the central district shows moving sidewalks laid out in a pattern which would distribute service equitably over the whole central business district. There are many possible patterns depending on how much service the city could afford in terms of the cost of energy. The routes of the moving sidewalks are shown as continuous lines but of course they need not be. If they were continuous they would have to be elevated or depressed so that anyone moving at right angle to them could cross. They might be kept conveniently at ground level in most cases by arranging breaks between one section and the next. Thus pedestrians could cross at the street corners as they are supposed to do today.

The downtown stores would be department stores or specialty stores as

they are today. They would function in a somewhat different way but there would also be some new factors in the downtown shopping picture. One of these would be the information center. Answers to all types of questions involved in dealing with either government or business would be available in the information tower but many of the questions would be those people like to have answered at the beginning of a shopping trip.

Another feature of the downtown shopping area would be a continuous merchandise fair. The purpose of this central display area would be to give manufacturers a place to show new products whether or not the retailers were ready to accept them. Space would be limited and it would not be appropriate to allow manufacturers to rent space merely to advertise a product already well established. Some products which received a trial run in the merchandise fair might be quietly withdrawn if they did not arouse sufficient interest. Those which attracted a real interest from consumers would doubtless soon be stocked by some of the retail stores.

One of the functions of the downtown shopping area as compared to outlying shopping districts is to enable new items to get established in each metropolitan market. The merchandise fair would allow this to happen more simply and more efficiently. The process whereby this now happens through department and specialty shops is often fraught with excessive costs and risks for both sides. Under the proposed plan

ience goods to the sizable daytime population downtown and usually resemble similar outlets in residential neighborhoods. Together the specialty shops and the department stores represent the maximum breadth and depth in goods being offered to the city. A department store, however, is not just a collection of specialty shops nor is a specialty store a mere detached replica of a department in a general store.

It is now well established that no department store can carry everything that the market offers. As much as some buyers would like to do this, the controller knows that he cannot permit it and have the store remain solvent. The true function of a great central department store is to project a conception of contemporary living. In a city of moderate size one such store is enough to allow consumers to feel that they are keeping abreast of the times. If such a store does a good job it may hold most of the residents of the city as customers. If not, many will do part of their major shopping in other cities. In a large city there is room for more than one competing conception of what modern life requires. At one time these distinctive appeals tended to correspond to income classes but these distinctions are becoming blurred as income is progressively equalized.

A new quality of merchandising vision and courage is required to create a distinctive character for a great general store today. Motivation research indicates that there are different psychological types among



no manufacturer would sell anything or take orders at his booth in the fair. It is intended that the fair supplement the normal channels rather than supplant them.

Another function of downtown stores is to present either a breadth of assortment or a depth of assortment which it is not feasible or economical to duplicate in every residential area. This is aside, of course, from the outlets which sell conven-

consumers, each ready to become the steady customers of the store which projects the right image. Where several department stores were competing one might go after the younger couples by being aggressively modern. A second might present itself as safely traditional but progressive. A third might emphasize economy but attempt to approximate a more positive view of life on a "most for your money basis."

It may be argued that great stores today are engaged in projecting a way of life. Granting that they do this inevitably through their very existence, their tradition, and the combined efforts of buyers and merchandise managers with a more or less harmonious outlook, the fact remains that in relatively few stores is the projection a conscious and integrated effort directed from the top. Most often it is confused by obsolescent notions such as carrying all goods the market affords or catering to the vanishing carriage trade.

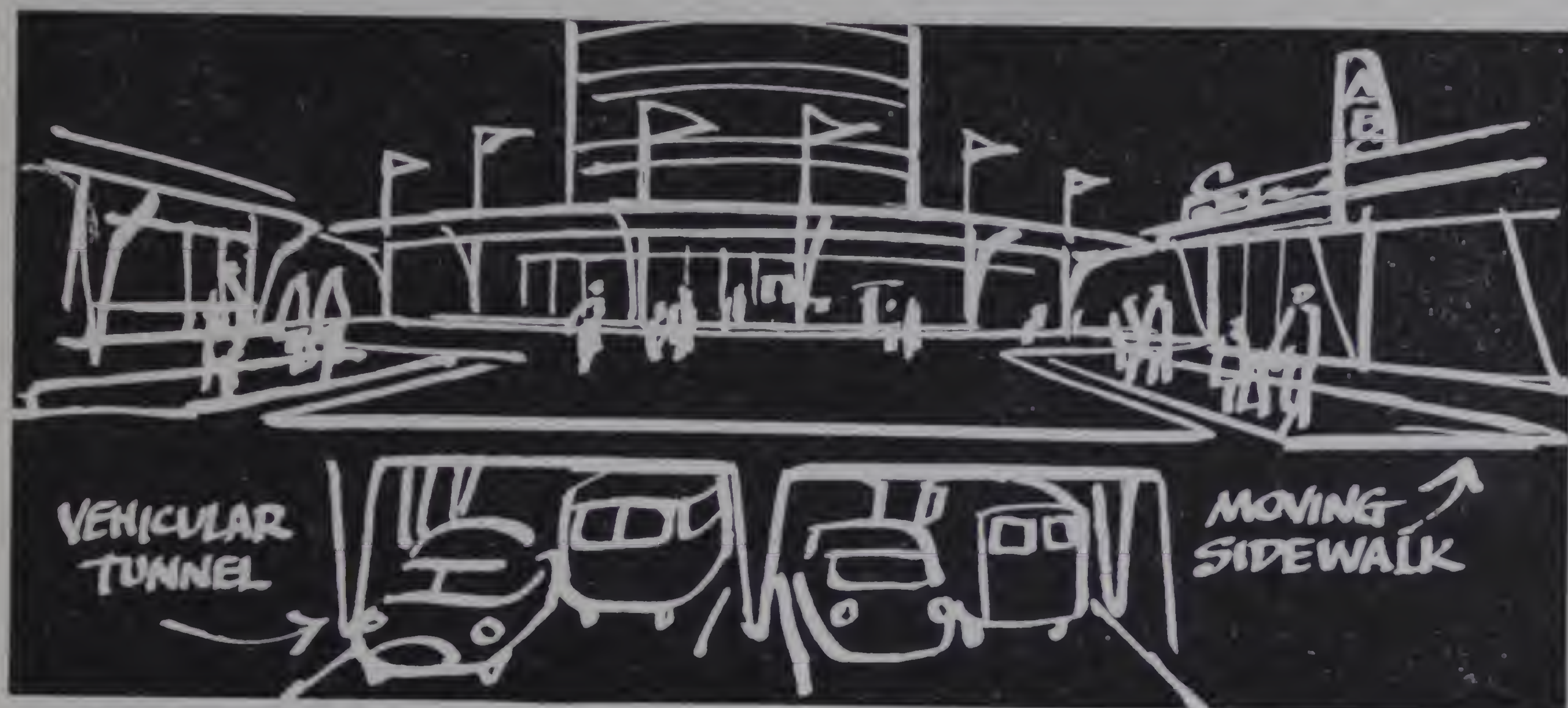
Certainly motivation studies indicate that customers are inclined to

store will continue to be patronized by women as the chief purchasing agents in most households.

Downtown retailing in the future

THE DEVELOPMENT of electronic control and communication will have an even greater impact on marketing than on production.

Information handling is a basic function of the marketing system. Hundreds of messages may be involved in moving a single unit of a product from producer to consumer, taking into account advertising, marketing research, trade relations, sell-



invest their favorite stores with personalities congenial to themselves. A consistent and well informed effort to project a contemporary manner of living would mean more satisfaction for consumers and more efficient operation for retailers.

A downtown specialty store, as its name suggests, is a store for people with special interests. If it merely duplicates a department in a general store then something is wrong with either the specialty store or the department store. The specialty store offers the fullest depth of assortment in its particular field. Its personnel possesses a depth of specialized knowledge and many of its customers are connoisseurs or technicians in the given field. Specialty retailers should be those best informed about what is available in a type of product and their customers the people most experienced in using such products.

Downtown specialty stores will survive if they fulfill their mission. Nowhere else in the city would it be so feasible or convenient for the consumers with a truly specialized interest to see all that is available in a given field. The term specialty store naturally covers many lines from apparel to camera shops. The relative importance of specialty lines will change decidedly between now and 1980. Many then will appeal as they do now to the specialized interests of male hobbyists. The department

ing at all levels, inventory reports, purchase orders and consumer inquiries before and during the shopping trip.

Much of the discussion which makes up the body of marketing transactions is human, repetitive and inexact. Much of this information and even the transformation of information into routine decisions could be handled better by machines.

A strong trend in this direction is already established in wholesaling.

The physical handling of goods will also be minimized in the downtown stores of the future. Everything will center on the basic function of facilitating selection and concluding the sales transaction. Essential samples or carry-away goods will be delivered to downtown in off peak hours to avoid adding to congestion in the traffic tunnels. During the day emergency deliveries will be by special pneumatic or belt conveyers underground or by helicopters and blimps overhead. Incidentally, similar aerial taxis will serve hotels and major business offices, connecting them with railway stations and airports which mostly will still be on the outskirts of the metropolitan area.

The stores will not be the only attractions pulling people downtown. A greatly increased variety of centrally located services and entertainment will in turn help to create traffic for downtown stores. The leading

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SALES BOOST



continued

stores will be reached directly by public transportation underground or by moving sidewalks and connecting with major parking areas just outside the trade and service center.

In the downtown specialty store of the future, much of the routine showing and demonstration of goods would be mechanized, leaving the manager and his assistants free to act more genuinely in the role of consultants. In the rear of the store would be booths in which a customer could quickly review the whole range of the inventory for a particular field. This would be accomplished through colored films which could be viewed while sitting in the booth. When the customer found something in which he was seriously interested he would

cated for the purpose. In fact, the selection booth itself might in some cases serve as an elevator. On one or more floors there would be a convenient and comfortable place for the salesmen and customers to sit down for more detailed discussion or to complete the transaction.

The squares marked "D" near the entrance of the store in the chart designate mechanized demonstrations. The particular article would be hooked up mechanically so as to go through its normal processes or to show it off from various angles. A description of these demonstration steps will be recorded on tape and coordinated with the physical movements. The customer, by pressing a button, can turn on any demonstration and make his own judgment of the product.

Department stores will use similar devices but the whole approach will be from a different slant. Stores bring goods and people together. It is natural and desirable for the specialty store to emphasize the goods and the department store to emphasize the people.

In the future, department stores will know far more about their customers both statistically and individually. They will have files of information available on their regular customers including photographs and facts about their homes and

to make the most effective choice in the shortest possible time.

Great operating efficiencies could develop in this type of retail structure. Goods handling is dreadfully inefficient in many downtown stores. Many department stores already operate warehouses outside the city center but some of these warehouses look like the attic in an old ladies' home as compared with a modern streamlined grocery warehouse. The relations between merchandise managers in the store and the warehouse operators often keep both sides in a perpetual state of hysteria. Yet even today advanced techniques for current inventory control and communication make the complete physical separation of selling and goods handling entirely feasible.

One of the great issues among retailers is how to get better retail personnel to cope with increasingly complex problems. Retailing will be able to compete with industry for its share of the better talent when it mechanizes its routine and repetitive steps such as physical handling of goods, answering the same question, or giving the same demonstration over and over. The downtown stores are the ones with sufficient volume and adequate stake to pioneer these changes. Meanwhile they have every incentive to spearhead the general civic movement for reversing the present trend toward deterioration and making the city center fully effective again.

This picture of a future city and its shopping center may seem far removed from what exists today. In particular the question might be asked as to how long the results of such a reorientation would remain valid in the face of continuing population growth in major cities. The answer is partly that modern cities are wasting a tremendous amount of space through improper utilization.

When this slack is all taken up, growth will be possible in two directions: by more intensive use at the center and expansion at the periphery.

Finally, there must be a point of optimum balance at which world populations should be stabilized, including that of the United States and its major cities. Currently the growth trend continues somewhat to the embarrassment of some population forecasters, but this is one of the many problems we may know more about in 1980.—WROE ALDERSON.

Wroe Alderson is a member of the firm of Alderson & Sessions, consulting economists. His conclusions are based on a series of basic studies in consumer motivation and shopping habits, some contact with city planning and a long career in marketing.



stop the film and press the button marked "Location." A light would go on out in the store showing where the desired item was located.

If the specialty store occupied more than one floor, a light in the booth would indicate that the item was upstairs. The light symbol would further indicate whether the customer had to go upstairs to see the item or whether it would be sent down. In the latter case a stock clerk would place the item on one of the endless belt conveyers along the walls for transportation to viewing position on the first floor. If the customer was expected to go upstairs an elevator would be conveniently lo-

calized for the purpose. In fact, the selection booth itself might in some cases serve as an elevator. On one or more floors there would be a convenient and comfortable place for the salesmen and customers to sit down for more detailed discussion or to complete the transaction.

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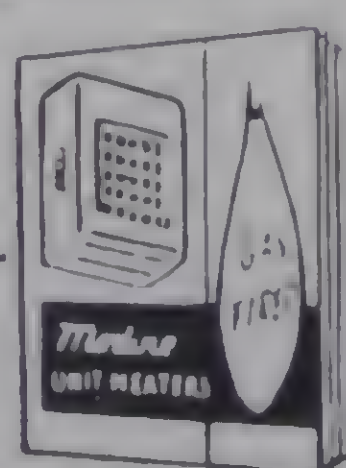
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DEMOCRATS

continued from page 30

past year from small and medium-sized business firms. Independent automotive parts makers protest that the big companies not only discriminate against them in advertising but are also trying to monopolize parts production. Independent associations of grocers protest that some bulk buying practices accrue only to the advantage of big chains. Executives of well run small and medium-sized businesses say they can't get equity capital to expand well run concerns.

The efficacy of antitrust legislation, along with conditions in the capital market, should be reviewed by Congress to find out what should be done to redress this growing imbalance of economic opportunity.

Our party is not against big business, per se. We realize the immense contributions it is making to national security, to research, to the improvement of living standards. However, the Republican Administration is unduly permeated by a big business bias. The Administration's bond-financed toll road program reflected the underwriting preferences of big bankers and investment houses. Their desires carried more weight than those of state governors, highway specialists and the desire of the people for more and better roads.

When a single interest, like that of big business, prevails in the councils of government to the virtual exclusion of the small business interest, the farmer interest, the worker interest, the danger is that this influence will be exerted in a lop-sided manner, and at the expense of everybody else. It goes against the American grain to give too much power to any economic faction, big business or others. The test of a free society is the way in which it promotes fair rules of the game and equitable treatment for all economic interests and groups. What is good for the country is good for big business, not the reverse.

PUBLIC POWER

Administration favoritism toward big business is further shown in Dixon-Yates and the close-to-the-chest manner in which various crucial defense contracts have been awarded, as well as in the Republican partnership policy in the development of natural resources. In the Pacific Northwest, for example, the Administration favors the proposal of the Idaho Power Company to build three low rock-fill dams at a cost of \$191,000,000 in the vicinity of Hell's Canyon on the Snake River to pro-

duce 505,000 kwh or just about enough electric power to meet the thriving Northwest's needs for next year. By contrast, the proposed federal concrete high dam our party favors would produce 1,200,000 kwh and add 25 per cent to the area's capacity to generate electric power. The cost of construction would be \$308,000,000.

The economic burgeoning of the Northwest during the past 15 years has been due primarily to cheap public power which has enabled it to diversify industrially. It no longer has to rely almost entirely upon lumber, fishing, agriculture. Its population has increased by around one third since 1940. It now turns out 44 per cent of the nation's aluminum and is equipped with the skills and private capital to become a center for light metals and the electrochemical industries—if it gets enough power.

A federal dam would not only provide the necessary power at a three-mill rate, as against the seven-mill rate to be charged by the Idaho Power Company, but would also provide the potential to serve such additional purposes as flood control, farm irrigation, water storage, land reclamation. It would cut the cost of producing superphosphate from southeast Idaho's deposits (52 per cent of the U. S. total) by \$8.40 a ton; this is important to farmers all over the country who need low-priced phosphate fertilizer.

A project like the proposed federal dam epitomizes what we mean by government assistance to create a climate in which all sizes and types of private enterprise can prosper rather than something designed primarily to help big business prosper. One new job has been created for every ten kilowatts of new power installed in the Northwest and TVA areas. Similarly, farm families there and elsewhere spend an average of \$4 on electrical goods for every \$1 put up by the federal government on REA loan funds—thus begetting a \$10,000,000,000 market for private enterprise and illustrating the multiplier effect of intelligent federal outlays aimed at economic growth.

The claim that the Idaho Power Company will pay taxes while a federal project will not is vitiated by the company's request for millions of dollars' worth of tax amortization certificates. Wide of the mark, too, is the Republican contention that resource development should be almost exclusively the concern of the region immediately involved. Yet many products made in the Northwest cross state lines. Many others are sold in national markets. Conversely, the economic well-being of the Northwest is important to clothing manu-



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DEMOCRATS *continued*

facturers in Illinois, or cattlemen in Texas, just as the region rendered more prosperous by the TVA is important to other parts of the economy.

Yet the Administration has been very sympathetic toward the small group of public utility magnates and financiers who have been trying to discredit the TVA in their effort to fashion a new empire in electric light and power. They have been heavy contributors to the propaganda slush fund to attack the TVA not because it is a symbol of public power but because it is a yardstick protecting the consumer on electric rates which in the area served by TVA have been reduced 60 per cent since the TVA came into existence. It was the TVA which first pointed the way to high volume output at low unit cost, goading the privately owned utilities into becoming more efficient. They complain about TVA competition. But the TVA does not compete in their franchise-protected territories where they hold the rights of a legal monopoly. The TVA competes by inducement and example.

AGRICULTURE

Farm prices have sagged 17 per cent since the Republican Administration took office. They are still skidding. When measured in constant dollars, net income per farm has declined, at an annual rate, from \$2,605 in 1952 to \$2,050 in 1955, a slide of 21 per cent. While profits of the big food processors rose 17 per cent during the first eight months of this year, the farmer's share of the market-basket dollar has dwindled by six per cent. His savings are being depleted, a fact which in considerable measure accounts for the ten per cent rise in his short-term borrowings and mortgage loans. The flexible price support program introduced by the Administration is driving prices and income toward the lowest points since 1942.

Under the parity levels sponsored by our party and which prevailed through 1954 oats were 75 cents last year. They are now 61 cents. Grain sorghums were \$2.28; they are now \$1.78. Both have dropped 15 per cent as the result of the Republican switch-over from our 85 per cent of parity to their 70 per cent of parity. Barley and rye are in the same position. Soybeans and flaxseed are down ten per cent. The price of hogs per hundredweight is \$9 lower—from \$26 in 1954 to \$17 today.

The Administration's slant on agriculture is distorted by the false assumption that farmers are the only

ones who get a subsidy or payment for surplus. Yet business—and especially big business in this Administration—gets subsidies in the form of tax relief, tax amortizations for plant expansion, tariff concessions, along with giveaways of public property. Railroad and aviation industries get subsidies for carrying mail. Labor gets a subsidy through unemployment insurance. Idle manufacturing capacity and idle manpower comprise surplus for which the whole country pays in the form of industrial production lost forever while at least a food surplus when stored has value.

Nevertheless, the Republicans single out the farmers as if they were the only recipients of federal aid and the only real drain on the taxpayer.

The entire system of farm price supports under Democratic administrations from 1933-1953 cost less than \$1.00 per capita per year. This was a small premium to pay on prosperity insurance for agriculture. When farmers thrive, they buy more of what industry can turn out; when farmers are forced to curtail that buying, industry suffers, soon or late.

To save the \$34,000,000,000 farm market from further shrinkage, with its adverse impact on the whole economy, a first step is to restore the 90 per cent mandatory price supports to the basic crops of wheat, cotton, peanuts, rice and to adjust upward supports on dairy products, small grains, other commodities. This is no ideal solution for all time. But it is one tested remedy that will promptly arrest the decline in farm prices and incomes while longer term measures are being worked out.

Among these, top priority should be assigned to the essentials of the much maligned and misunderstood Brannan plan. Farmers would dispose of their products on the open market to give more elastic play to supply and demand forces, to canalize food directly into consumption channels. The government would pledge to purchase whatever farmers could not sell and at prices based on a fair return on costs formula.

The Administration has already taken a leaf from the Brannan book in establishing 110 per cent of parity for wool, which is now quoted at 106 per cent; this has been the Republicans' one success in an otherwise bleak record in farm support pricing.

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new school construction, the Administration's budget allots a paltry one half cent out of every dollar to federal aid to education. The states and localities are now spending around \$10,000,000,000 a year for all educational purposes (building, maintenance, administration, salaries) but they are lagging behind in the minimum needs for new plant as well as in the need to pay teachers more adequately.

Around 60 per cent of the American people are not living in the states where they were born. It can hardly be contended that education is strictly a state or local and not also

a national problem. More federal support for services necessary to defense is particularly vital. The Soviet Union is expanding training in science, engineering, other technical pursuits.

It is a clear obligation of the federal government not to let the communists get ahead of this country in technical and other spheres of study. To help prevent the malnutrition of the American mind, federal aid to education should be enlarged toward \$1,000,000,000 a year.

The criterion is not whether we as a people can afford to do these things but whether we can afford not to do

them if we really want a strong, stable, expanding economy. This we must have not only for our own sake but also to fulfill more effectively our role of leadership in the free world. We cannot let the third of mankind now poised between the camps of freedom and communism go over to the side of the enemy.

So the criterion of what we must do applies to economic aid to assist other countries to combat communism, and to measures to stimulate free world trade, quite as much as it applies to such domestic concerns as health and the development of national resources.

Paul M. Butler

Chairman, Democratic National Committee

tells why Democrats will win

EXCEPT for the uncertainty over who will be the presidential candidates for the two major parties, it is possible to make a reasonably clear forecast of the 1956 campaign. Of course the personalities of the rival nominees will certainly be an element in the outcome of the election, but at this time any predictions must necessarily be based on the record and fundamental strength of the two parties. With that in mind, I have no hesitation at all in saying that the Democratic Party will win in 1956.

There is ample evidence that the Democratic Party is the majority party today. Even with Mr. Eisenhower's sweeping victory in 1952, the Republican Party was able to gain only a narrow majority in the Congress.

Despite the President's active intervention in the 1954 elections, the Republicans lost their congressional majority.

Moreover, in the period since 1952 the Democratic Party has won victory after victory in municipal, county and state elections. In virtually every pivotal state where a governor has been elected since 1952, the Democrats have won. Finally, current public opinion polls indicate that the Democratic Party is clearly the majority party.

But the reasons why the Democrats will win in 1956 lie not in these

facts but in the record which won the Democratic Party the votes of confidence it has received since 1952.

In its two years as a minority in the Congress the Democratic Party proved more responsible and more cooperative with the President on those parts of his program which had a broad appeal to all of our people than did the President's own party.

Since the Democratic Party has become the majority party in the Congress the Administration has been able to accomplish legislative and administrative achievements which it was unable to do with a Congress of its own party. This has been especially important in the vital fields of foreign policy and national defense.

Democratic leadership made the Geneva conference possible and enabled the Administration to resume the practice of diplomatic negotiations without fear of congressional restrictions and repercussions.

In the fields of domestic policy this Administration has made a record which has strengthened the opinion of the voters that the Democratic Party is the party which works most assiduously for the welfare of the many and which strives to encourage a prosperity which is shared by all. It has strengthened the opinion that the Republican Party, to put it bluntly, is more concerned in assist-

ing those who are already at the top of the economic heap.

This is an honest difference between the two parties. The record is clear and it will be up to the voters to decide whether it is a good thing for gigantic corporations to grow larger while bankruptcies of small businesses increase. The voters will have to decide whether it is good for our economy for agriculture to slump steadily, and for small family farmers to be forced to move to the city and seek factory jobs. The country will have to decide whether it is a healthy economy when corporation profits and stock market paper gains soar far ahead of the income gain of the average American family upon whose purchasing power all business prosperity rests.

The country will have to decide whether it is a healthy thing to have the average family shouldering the heaviest personal debt in its life and daily going deeper into debt to support the so-called boom in autos, appliances and the like. The voters will have to decide whether tax cuts for big corporations are more helpful to their personal finances than tax cuts for the average taxpayer.

And finally, the people will have to decide whether they want the agents of big business moved into the government to shape the decisions which affect their own businesses.

Neither the Democratic Party nor the American people are antibusiness. They want business prosperity. But they also want prosperity for the wage-earner and the farmer. And they want a government that is neither pro nor anti business nor pro nor anti labor nor pro nor anti farmer. They want a government which serves no special interest but the public interest. That is what the Democrats will offer them in the 1956 campaign, backed up by a long record of performance in the public interest.

END

REPUBLICANS

continued from page 31

more cases than the previous Democratic Administration, over a comparable period, has moved effectively against both antimonopoly violations of the Clayton Act and deceptive practices.

The Small Business Administration has been established to assist small business with loans not available from other sources and provide technical and managerial aid.

The Eisenhower Administration has delivered the death blow to government competition with business by abolishing or selling 100 federal undertakings. Among these were 25 synthetic rubber plants sold to industry at a profit to the taxpayers of \$10,000,000; 168 ice-cream plants in 36 states; an alcohol plant at Muscatine, Iowa, and the Inland Waterways Corporation, which had lost money during almost every one of its 33 years of operation. Audits of Rural Electrification Administration cooperatives were transferred to private accounting firms. In the Defense Department alone, 14 out of a total of 46 bakeries were closed down. So were a rope and cord mill, a furniture repair shop, a tire retreading center, five coffee roasting plants and six cement mixing plants together with many other activities competing with private business.

PUBLIC POWER

The Republican conviction that the economic role of government is to help people to go forward on their own extends to the community and the region. In this spirit, the Administration fashioned its partnership policy for developing natural resources. It is a framework within which individual citizens, private firms, state and local governments can participate with the federal government, rather than to look to Washington exclusively to do everything for them.

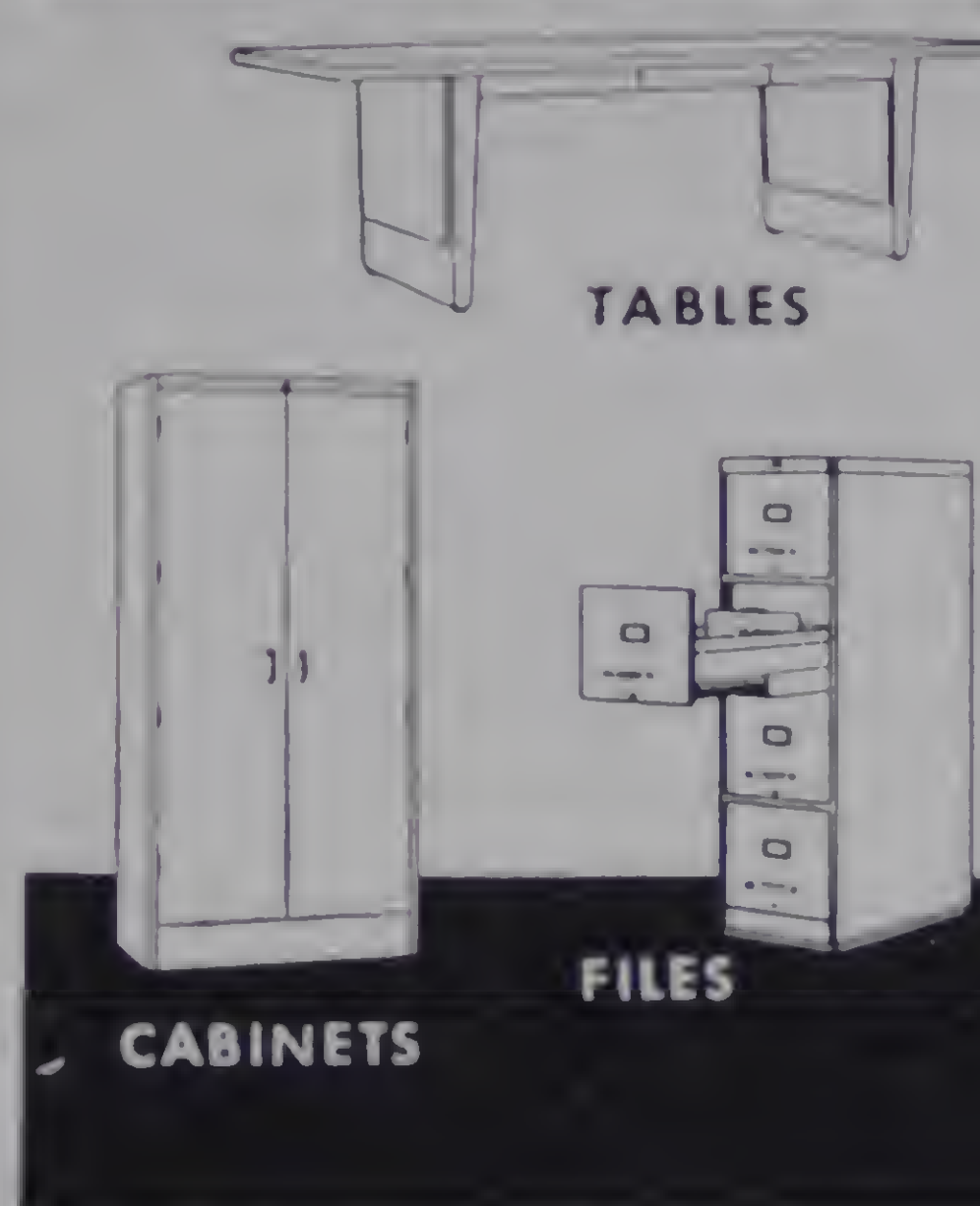
Wherever feasible, they should be entrusted to private enterprise—a viewpoint exemplified in the Federal Power Commission authorization to permit the Idaho Power Company to build three dams in the Hell's Canyon district along the Oregon-Idaho border. The cost of \$133,000,000 would be financed entirely by private investment. The power capacity would be 767,000 kwh. But public power proponents want the government to build a single federal dam at a cost of \$399,000,000 to the Federal Treasury, and with a power capacity of 785,000 kwh.

If the federal project should go through, the taxpayers would carry



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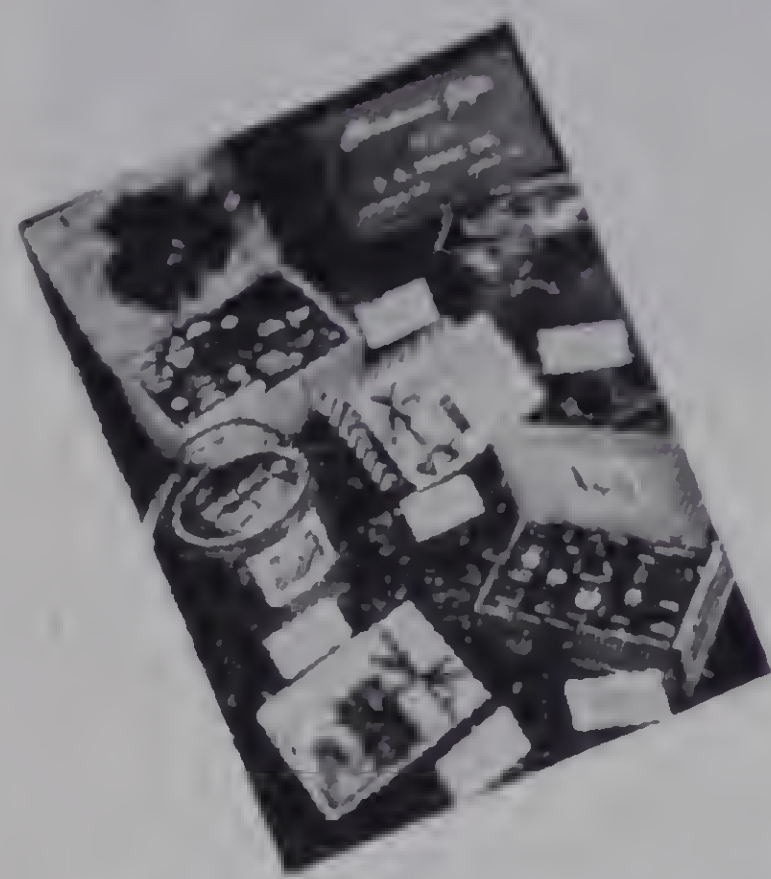
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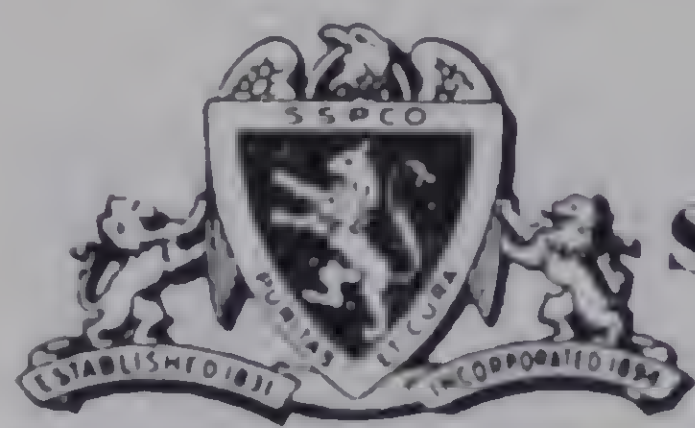
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REPUBLICANS *continued*

the burden of the three per cent interest on the nearly \$400,000,000 required to build it. The federal dam would pay no property or other taxes. Yet, if the project went to the Idaho Power Company, it would pay \$10,000,000 a year in local, state and federal taxes.

There is another brass tacks consideration. The legislation before Congress for the federal project is simply to authorize a later appropriation for constructing the single dam. However, the fact that an undertaking is authorized does not necessarily mean that funds will be forthcoming. At the moment, 1,115 authorized projects, similar to this one, (\$9,000,000,000 worth) are on the waiting list for which Congress has voted no money. Since it has already appropriated \$100,000,000 for public projects in the Northwest, the prospect is that, at the present rate, another nine years will elapse before Hell's Canyon can come up for its turn. Still another ten years would be required to complete the federal building program.

In contrast to this probable 19 years of postponement, the Idaho Power Company could finish its building program within 30 months after getting the green light from the Federal Power Commission. To the power-eager Northwest, this may spell the difference between further industrial development after 2½ years, or a stand-in-line wait and hope period of nearly two decades.

In power, as in highways, health, education and foreign trade, we favor clear-eyed, realistic businesslike programs that can be put into effect.

AGRICULTURE

Two thirds of the decline in farm prices occurred in the 21 months before the Eisenhower Administration took office. The Truman Administration stubbornly adhered to high rigid price supports despite all the warning signals, as early as February, 1951, that they could be no longer justified. The Korean war helped to conceal the underlying condition but merely deferred the day of reckoning. Our party inherited an artificial price structure that sought to suspend the law of supply and demand and which, to an overwhelming extent, accounts for the present accumulation of \$7,000,000,000 in surpluses, in a loss to the government of \$800,000,000 in payments for fiscal 1955, and for a storage bill of around \$967,000 a day.

The current glut was intensified by the readjustments which occur in every market during transition from a wartime to a peacetime economy. Most of these adjustments have been made even though particular

items may show a seasonal dip. Certainly the worst of the shake-out is over. Production and use are moving toward balance again.

Meanwhile, the flexible price support system we introduced and which went into effect only this year is already stabilizing prices in some sectors and can be expected to show the same results in most others as soon as it has had a fair trial.

Combined with these flexible supports, which can buttress the farm economy for long term economic growth, are programs of product promotion illustrated by the dairy products campaign. In 1954 consumption was going down. Production was going up. Incomes were falling—despite support at 90 per cent of parity. The Department of Agriculture lowered parity support to 75 per cent, then joined with the dairy industry in aggressive merchandising beamed at grocers and housewives. In consequence, surplus stocks in butter were reduced from 461,000,000 to 179,000,000 pounds and in cheese from 422,000,000 to 273,000,000 pounds. In addition, 25,000,000 added gallons of milk were consumed by children in 47,000 schools. Prices received by farmers are now back to what they would have been if the 90 per cent of parity had remained in force, but the threat of overproduction has been stayed.

The drive to rebuild export markets has had a remarkable success. In 1954, farm exports were ten per cent higher than in 1952; negotiations to boost them still further are just being concluded. Surpluses of wheat, corn, barley, rye and dairy products have been traded for such invaluable additions to the defense stockpile as antimony, cobalt, lead, manganese ores, tin.

Republican prosperity is persistently lifting demand for both greater quantity and quality of farm products. The outlook for beef, poultry and eggs is bright. Hog quotations should hold at \$16 per 100 pounds and corn up to \$1.25 a bushel, the former yielding a fair profit, the latter a good one.

Contrary to statistical attempts to portray the farm economy as in a state of panic, the over-all financial position of farmers is comparatively strong. Prices for farmland have leaped five per cent since 1954. The ratio of farm debts to assets is 11 per cent, the lowest in 33 years.

We intend to keep bolstering farm incomes and prices by working along all fronts of this complex problem, at home and abroad, and to develop a combination of other constructive measures to include:

1. Selective incentives to improve quality by higher but still flexible

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2. Inducements to conserve soil by planting grasses and legumes, thus taking some cropland out of immediate production.

3. Steps to widen promotional and merchandising programs to cover other than dairy surpluses.

4. Diplomatic agreements to enlarge foreign outlets by using surpluses as an instrument to combat communism in underdeveloped areas.

HIGHWAYS

The Administration proposal to spend \$31,000,000,000 to improve

and expand highways over a ten-year period, and thus achieve a safe modern national network of roads, with all this would mean to the economy, represented the most hard-headed and authoritative thinking on this subject.

The program was to be financed by a 30-year bond issue, the traditional and tested method for underwriting road development.

But the Democrats vied with each other to present an alternative scheme which was not only impossible to execute but would have imposed direct levies on the people through added taxes on tires, gasoline, trucks, buses, trailers. The

Democrats killed the Administration's practical program and then, impressed at last by the non-workability of their own highway plan, killed that, too; the hope for some partisan political benefit was not absent.

SCHOOLS

They also ignored the Administration's school construction proposal which would have made nearly \$7,000,000,000 available, over three years, by fusing the financial resources of private citizens, and local, state and federal governments. It would have built 200,000 classrooms for 6,000,000 children.

Leonard W. Hall

Chairman, Republican National Committee

tells why Republicans will win

THE Republican Party will win an overwhelming victory in 1956.

The accomplishments of the Eisenhower-Nixon Republican team over the past three years have been without parallel in the history of this nation.

This record of Republican success reaches into every home in America, and touches all segments of our people.

We have kept the promises made to the American people in 1952. More and more they realize that the Republican Party has been living up to the philosophy of Lincoln in providing government "of the people, by the people and for the people."

Here are six reasons why a Republican Administration will be returned to power again in 1956:

First, this nation is at peace. The foremost issue of the century has been met—we have successfully waged peace. Nowhere on the face of the globe is an enemy soldier shooting at an American boy. There is no greater tribute to the leadership of President Eisenhower. Our foreign policy has combined firmness with patience. We have forced international communism on the defensive.

Second, we now have the most powerful defense force at any time in our history. This has been achieved at less cost. Admiral Radford,

Chairman of the Joint Chiefs of Staff, reported to the President recently that we are now better prepared to meet an enemy attack than in his entire 40 years' military career.

Third, we bring to bear upon the problems of peace and national security the resources and advantages of a booming economy. Our nation has reached new heights of productivity and prosperity. This nation today is in the soundest period of prosperity we've ever known.

This prosperity—which is smashing all previous records—can be summed up in one sentence: More Americans are working at more jobs, making more money, with more take-home pay to enjoy more good things of life than ever before in our history!

Our party will win because voters from all walks of life are beginning to realize that while our opposition talks, Republicans deliver.

We have given America honest money and economical government. We're on the threshold of a balanced budget. Inflation has been stopped.

Spending has been cut by more than \$11,000,000,000. The income tax law has been humanized. Every taxpayer in the nation benefited from the Republican Administration's \$7,400,000,000 tax cut. We

have sound fiscal policies. The value of the dollar has been stabilized, protecting wages, saving accounts, pensions and insurance. This Republican Administration has done those things which again give people confidence in their government.

Fourth, we have replaced controls, regimentation and the trend toward socialism with an incentive economy. The Republican way is based on free competitive enterprise in the American tradition. We have increased the responsibility of state and local communities. Republicans are returning government to the people, where it belongs.

Fifth, this Republican Administration has made major advances in the field of welfare for all our people. We created the Department of Health, Education and Welfare. We extended protection of old age and survivors' benefits to 10,000,000 more Americans. We have expanded hospital and school programs on a partnership basis. These advances have been made for all people, not for the benefit of any special interest group. We have lived up to our 1952 platform promises.

Sixth, we have restored honesty and integrity to our national government. Republicans have wiped out communist influence in government. When evidence of wrongdoing is uncovered, Republicans clean up—not cover up.

These are a few of the major Republican accomplishments, which we will submit to the voters next November.

The Republican Party will win in 1956 because Americans want to preserve their freedom, and because they want to continue the progress under the Republican Administration which benefits all the people of our nation, our children, and our grandchildren.

END

RUSSIAN MANPOWER

continued from page 41

heavy industry at the expense of consumer goods and the high rate of training scientists, engineers and technicians. Russia faces many economic problems aside from manpower alone.

How do Russians utilize their high school graduates at present?

About one quarter to one-third of these graduates—the majority of them 17 years old—entered higher education this year. About one quarter went into semiprofessional and technical schools. The rest took employment or entered schools training skilled labor for industry. Finally some were absorbed by the military draft. In the past the majority of Soviet ten-year school graduates continued their training in higher educational establishments. The recent revision in the curriculum is designed to prepare students for immediate employment in case they do not succeed in entering a higher educational establishment or technical institute.

What has been the past trend in Russian education and the training of skilled manpower?

During the past 25 years the training of semiprofessionals and technicians increased about eightfold and enrollment in Soviet higher educational establishments training professionals increased more than tenfold. During this period, enrollment in Soviet primary and secondary schools about tripled. Enrollment in apprenticeship and skilled labor training programs in recent years has averaged about 500,000 persons a year. In recent years about 8,500 advanced degrees have been awarded yearly. The quality of general education and specialized and professional training has improved.

What is their enrollment in higher education and engineering?

About 1,750,000. This takes into account about 500,000 correspondence, extension, and evening students. Regular enrollment in engineering more than 300,000.

Has Russian development in recruiting and training skilled manpower surpassed that of the United States?

In scientific fields, including engineering and physical sciences, agricultural and biological sciences, health and medical fields Russia is training more specialists than the U. S. In the past 25 years our colleges and universities graduated twice as many persons as did Soviet

higher educational establishments. We graduated about 5,275,000. The Soviet Union trained about 2,660,000. However, the Soviet Union graduated about 42 per cent more engineering field professionals than we did: (USSR, 1928-54, about 682,000; United States, 1926-53, about 480,000). There were almost twice as many agricultural field graduates in the Soviet Union as in the United States (USSR, 1928-54, about 244,000; United States, 1926-53, about 133,000). In all health fields the number of Soviet and American graduates was about the same, but in medicine alone the Soviet Union graduated more than twice as many physicians as the United States: (USSR, 1928-54, about 320,000; United States, 1926-53, about 148,000). Of course, the Soviet Union graduated a substantially smaller number in the humanities, liberal arts and social sciences than we did.

What is the attrition rate among Soviet engineers and scientists?

Estimates for the past 26 years show that the average annual rate of attrition among professionals employed in the Soviet Union is about three per cent. Our attrition rates average more than four per cent per year.

How many scientists and engineers does the Soviet have now?

The Soviet Union has about 540,000 trained engineers with professional higher education. About 160,000 persons are in occupations which can be considered as scientific research.

What are the comparable figures for the United States?

Estimates run from 520,000 to more than 600,000 engineers in the United States and between 160,000 and 210,000 scientists. We have about 530,000 persons with college education in engineering. Not all of them work as engineers, however.

How many have entered Russian higher educational establishments in recent years?

Last year, first-year entrants into Soviet higher educational establishments numbered about 450,000. This is only about one quarter less than first registrations in all colleges and universities in the United States.

How were these students chosen?

On a competitive basis. More people aspire to get education and are turned down on the basis of competitive type examinations than are being permitted to take the training.

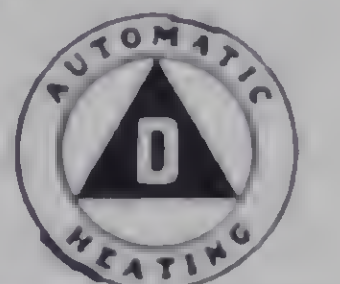
Is it possible to tell how many students Soviet higher educational
(Continued on page 104)



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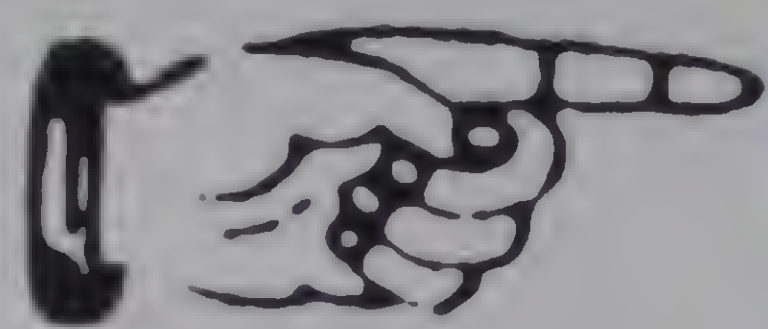
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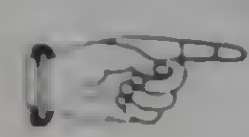
1. To honor and encourage organizations and firms that make a notable contribution toward community betterment, and toward strengthening free enterprise; and
2. To help businessmen and organizations become more effective in their efforts for the good of business, and in the public interest.

FOR THE YEAR 1955, the Chamber will present 26 National Recognition Awards in these three categories:

I. Program of work—This category is open to local chambers of commerce. Six awards will be made for outstanding achievement in conducting a well-balanced and productive program of work.

II. Congressional action—This category is open to local and state chambers. Seven awards will be made for outstanding achievement in generating greater interest in representative government, and in stimulating informed congressional action on national problems.

III. Economic understanding—This category is open to local and state chambers, trade and professional associations, and business firms. Thirteen awards will be made for outstanding achievement in helping create a better public understanding of our free-market economy and how it operates.

 IT IS EXPECTED that this National Recognition Awards program will add greatly to the store of practical working knowledge in the fields of community relations and economic understanding. The factual materials brought together each year by the contest—the award entries, case histories, information on new methods and successful techniques—will be classified and preserved in a library at the National Chamber's headquarters. These materials will then be available on a loan basis to organization executives and business leaders for their use and guidance.

AWARDS FOR THE YEAR 1955 will be presented at a special ceremony at the National Chamber's 44th Annual Meeting in Washington, April 29 to May 2, 1956.

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RUSSIAN MANPOWER

continued

institutions are likely to graduate in coming years?

By 1960 the Russians will graduate between 320,000 and 350,000 annually from their higher educational establishments. That will be just about the same or even slightly higher than the number of college graduates in this country by 1960. The projections for this country run between 320,000 and 330,000 for the 1960 graduating class.

How many will be engineers?

First-year acceptances in engineering in 1954 were about 108,000, which means about 70,000 engineering graduates by 1959 (on the basis of present attrition rates). This will be at least twice as many as we might turn out on an annual basis in that year. American engineering colleges expect to graduate about 29,000 in 1959.

Does your research indicate that Russian scientific and professional training equals our own?

With some reservations, the training professionals receive in the two countries is comparable. This is particularly true in the engineering and scientific fields. Soviet engineering training is based on about a 5,000-hour curriculum, five and a half years of training, and may be described as equivalent to training between our B. S. and M. S. degree, with some narrow technological specialization besides.

What are the weaknesses in the Soviet Union's training?

The greatest weakness is expediency which results in training graduates with narrow specialization. These specialists get no general education. In the engineering fields this specialization is aimed at training production engineers primarily and in preparing them for immediate employment in industry. For example, a metallurgical engineer with a specialty in copper refining and smelting cannot easily be transferred to employment in the ferrous metals industry. The Soviet planning is far from perfect, especially in terms of anticipating the demand for engineers with a given specialty several years after the student begins his training. This may cause great trouble in the placement and utilization of graduates.

A second difficulty is caused by the state's political and ideological interference in the teaching of various subjects. The biological sciences and agriculture have been particularly affected. In engineering and

physical sciences this pressure was also felt but to a lesser extent.

Finally, there are sharply pronounced differences in the quality of training. Of course we have these differences in this country as well. Some training programs or institutions in the Soviet Union are good; others are poor. Related to this is the uneven geographic distribution of Soviet higher educational establishments. Most good engineering schools and the best universities are located in the major urban centers of European Russia.

How many institutes of advanced education are there in the Soviet Union?

Roughly 800 higher educational establishments. There are 177 engineering institutions and schools of the M.I.T. type. There are about 88 in the fields of health and medicine, some 110 in agriculture, 35 in socio-economic fields and more than 400 in the field of education. The latter includes 33 university-type higher educational establishments.

Are western scientific textbooks used in Soviet higher education?

In a number of instances western European textbooks are used extensively. These include the outstanding textbooks used in this country, western Europe and in Germany in such fields as mathematics, physics, chemistry, electronics, and so on.

How good are the Russians' domestically produced textbooks in engineering and scientific fields?

Textbook writing has improved considerably over the past 20 years. Some excellent texts are available; but many texts reflect political interference.

What steps is Russia taking to correct its inadequacies?

A campaign is going on to offer a more general engineering curriculum. Political interference has been relaxed in certain fields.

In what scientific fields do the Russians appear to be strongest?

In the fields where the ideological interference has not been strongly felt and where some freedom of theoretical research has been possible. These fields are mathematics, some segments of physical science. I would venture the statement that, in theoretical research, there is some outstanding work, but the search for practical solutions greatly overshadows basic research and theory.

Have you any figures on the numbers of scientists in such critical fields as nuclear energy or aircraft design and production?

We don't have information to justify a detailed breakdown. My

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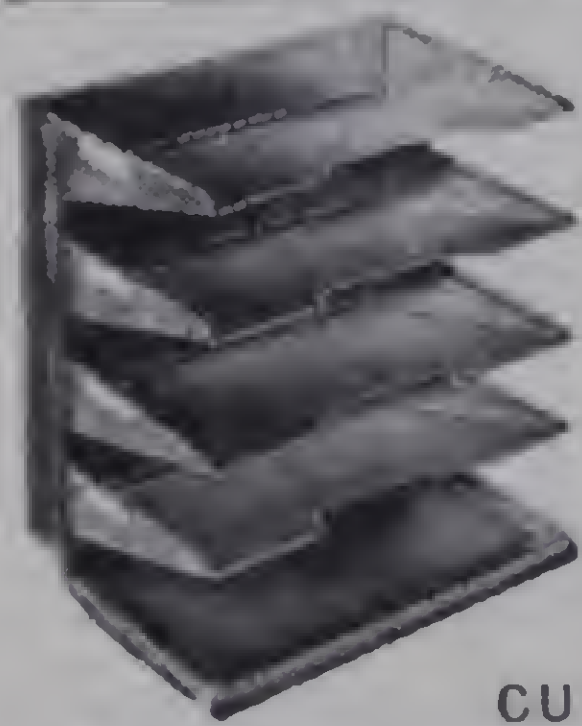
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RUSSIAN MANPOWER

continued

study doesn't deal at all with the training of atomic scientists, but training in the aeronautical fields appears to be better than in other engineering fields. Probably as many as five per cent of the engineering students are trained in aeronautical engineering.

Do recent Soviet advances in aircraft design and construction reflect this?

There may be some correlation but these gains might also stem from the fact that the Soviet Union is able to concentrate engineers in critical fields. Engineering personnel is unevenly distributed throughout their industry. On the whole, there are about 28 engineers per 1,000 production workers. In all types of machine building (which includes the aircraft industry) there are as many as 50 engineers per 1,000 production workers. In some defense industries (and this is presumably true of aircraft production) there are as many as 200 engineers per 1,000 production workers.

Isn't this a waste of manpower?

Judging from the results, not all of it is wasted. Our manufacturing firms probably could not afford one engineer to five production workers. In Russia the state decides to pour money into some undertaking and is able to foot the wage bill for an army of engineers.

What is the supply and rate of training of technicians and supporting personnel in Russia?

The Soviet Union has semiprofessional schools which offer formal training in a variety of fields ranging from technicians for industry to nurses and medical aides. Enrollment in these schools at present is about 1,700,000. These schools offer two to four years of specialized education and are considered to be on the secondary level. Recently, however, most of the entrants have been Soviet ten-year school graduates. Graduations in all fields run about 350,000 per year. Industrial field technicians who have received formal training number about 750,000 today. The annual rate of graduations of industrial technicians is about 80,000.

Does Soviet higher education shut out scientific knowledge from the western world?

They process foreign scientific and technical literature on a scale unmatched in any other country and they undoubtedly learn a great deal about the activities of western sci-

tists and scholars. There is a kind of paradox here. While expressing contempt for the philosophy of science, they use applied findings or research techniques which are based on these theories. In applied fields there is undoubtedly some adaptation of western inventions, technology and models.

Do Russian scientists lack ability in applying scientific knowledge?

This is a crucial problem. It is apparent that, in general, flexibility in changing models, retooling and rapid application of new or different industrial techniques is less in the Soviet Union than in the United States.

I think the Russians are often unwilling or in some instances cannot afford a rapid change of models, tools, and so on. This creates the impression that they lack the ability to master the change-over.

What sort of information did you utilize in organizing this study?

The study used extensively Soviet primary sources, periodicals, newspapers, and books in the field of professional education. In some parts the study is supplemented by accounts of Soviet refugee scholars and former Soviet teachers.

Are such books and periodicals obtainable in this country?

Many are available. The Library of Congress receives a great number of Soviet scholarly journals and trade magazines. Several of our large universities either subscribe directly or have an exchange of periodicals and books with Soviet libraries. Finally, some private concerns subscribe to trade magazines for monitoring purposes.

Are there any Russian scientific journals which cannot be obtained?

Yes. We know that they are publishing a certain number of magazines that are put under a restricted circulation list.

This applies also to some of their books.

How many technical documents of a restricted or critical nature in this country are available to the Russians?

I don't know how many. But as far as I know they can obtain a great number of publications which are not restricted by security classification but which do have a limited subscription quota.

This is apparent from the number of items they refer to in their scientific and technical abstracts of foreign periodicals.

You have mentioned ideological interference. Are the Russian scientists and engineers suspect?

Russian scientists don't have the

freedom of independent inquiry, independent decision and particularly the freedom to express their views, but they are no more suspect than any other group which might be capable of independent action or association.

How many engineers and scientists are members of the Communist Party?

Among engineers, about 40 per cent; among scientists, about 20 per cent. This is quite low, considering that communism has ruled Russia for almost four decades.

What inducements are offered to keep Russian students in school?

One is preferential treatment as far as military service is concerned. Others are a system of scholarships and stipends. Finally, career expectations are significant. The Soviet wage structure favors certain occupations among which scientific research, university teaching and engineering are close to the top. There are also bonuses in the form of houses, cars, rest homes for the summer and so on for those who choose careers in these critical fields.

How is the Russian scientific program organized?

The effort is centrally coordinated in the sense that several bodies are in charge of the organization of scientific research and higher education. The scientific research effort is coordinated through the Academy of Sciences of the USSR. The applied research in industry is directed by individual ministries. The training of professionals in higher educational establishments and of semi-professionals in various schools is supervised by the Ministry of Higher Education. All these bodies are under the control of the Council of Ministers of the USSR and in turn are permeated by other interlocking pyramids of control, such as party, security police, and planning organs.

END

INFORMATION in this interview is based on Mr. DeWitt's book, "Soviet Professional Manpower: Its Education, Training and Supply," which will be released soon by the National Science Foundation. The book summarizes studies made over a two-year period at the Harvard University Russian Research Center under the auspices of the Office of Scientific Personnel of the National Research Council-National Academy of Sciences.



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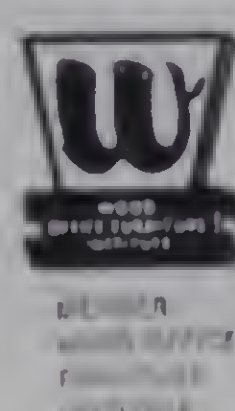
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Biggest firms get 1,370,000 new owners

- ▶ Foot fatigue costs \$125,000,000 a year
- ▶ Outlook for housing demand remains bright
- ▶ How to keep taxpayers informed

Sharp rise since 1950

The rapid increase in the spread of business ownership is revealed in a new survey of the nation's 100 largest nonfinancial corporations.



Total registered shareholders at the end of last year: 8,570,000.

Total four years earlier: 7,200,000.

Increase: 1,370,000 new shareholders in four years.

The study, made by the First National City Bank of New York, also shows total employment by the 100 biggest companies: 5,545,000.

Distribution of ownership, the bank reports, has increased more rapidly in recent years. Employees own large numbers of shares.

Total number of shares outstanding: 1,363,000,000. The bank points out that there is some duplication since some persons own stocks in two or more of the 100 companies listed.

Total assets of the 100 companies come to \$114,000,000,000. Assets totaled \$85,000,000,000 at the end of 1950. Assets average \$21,000 for each employe (\$16,600 four years earlier), although the investment varies widely—\$17,000 for manufacturing companies, \$29,000 for railroads, and \$33,000 for public utilities.

Income of these companies was \$94,051,000,000 in 1954. They spent \$87,106,000,000 (92.6 per cent) as cost of operations. This included \$46,189,000,000 for goods and services purchased from other companies, \$25,800,000,000 as wages, salaries, labor benefits; \$4,745,000,000 for depreciation and depletion; \$915,000,000 interest; \$5,019,000,000 federal income taxes; \$4,438,000,000 other federal, state, local and foreign taxes.

An additional \$3,962,000,000 was paid in dividends. The companies kept \$2,983,000,000 (3.2 per cent of total receipts).

Of the 100 companies, 52 are in

manufacturing, four in trade, 19 in transportation, 25 in public utilities.

Largest of the nonfinancial corporations is the American Telephone & Telegraph Company, with assets of \$12,850,000,000. Others in the top ten are: Standard Oil Co., (N. J.), \$6,615,000,000; General Motors, \$5,130,000,000; U. S. Steel Corp., \$3,349,000,000; Pennsylvania Railroad, \$3,040,000,000; New York Central, \$2,608,000,000; Socony Mobil Oil Co., \$2,257,000,000; Standard Oil Co. (Ind.), \$2,187,000,000; Southern Pacific Co., \$1,986,000,000; Gulf Oil Corp., \$1,969,000,000.

Foot clinic boosts employe output

Foot fatigue is a trouble maker which costs American business and industry an estimated \$125,000,000 a year in ruined sales, lowered employe morale and plant accidents.

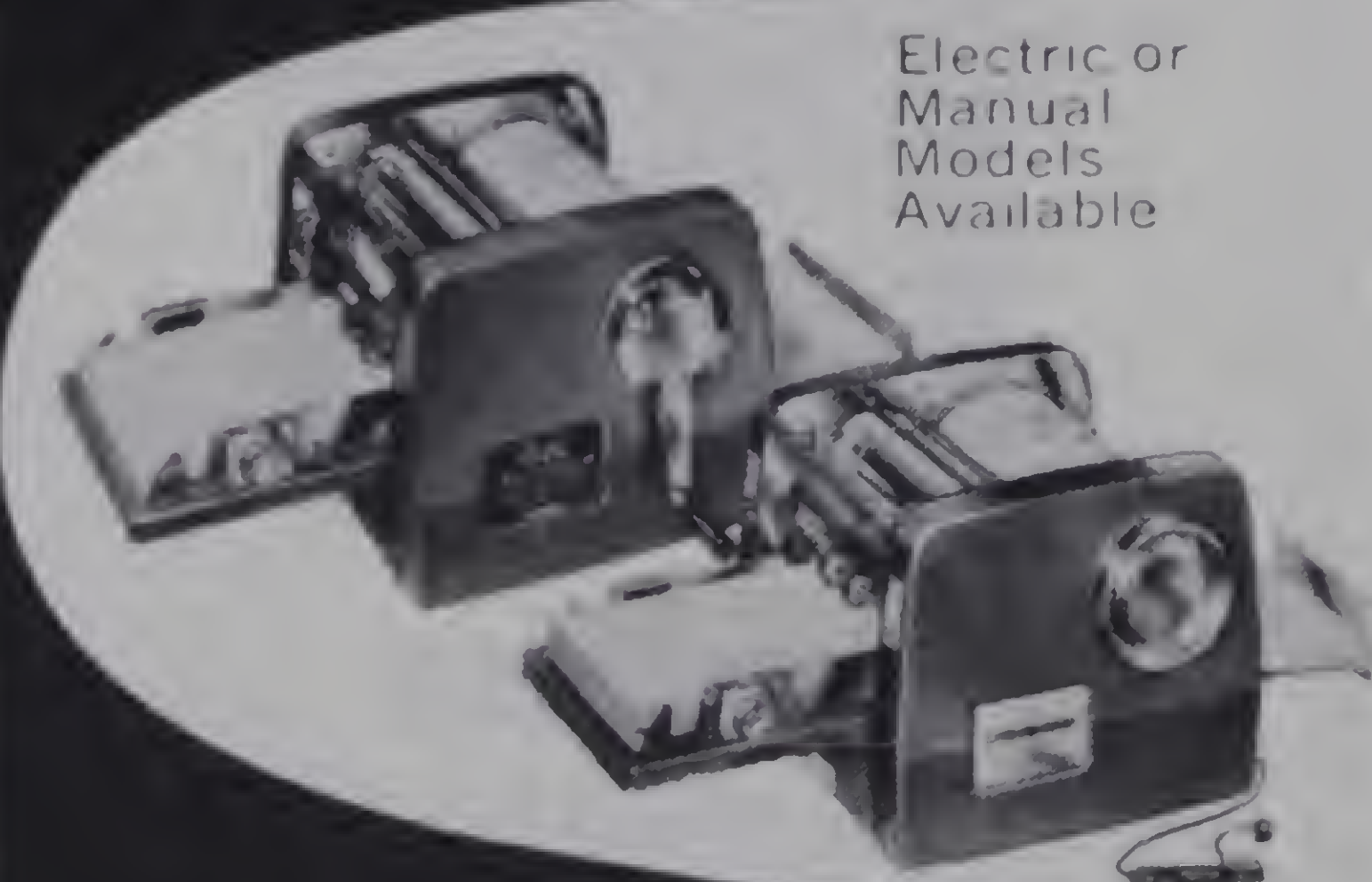


Department stores are in the van of businesses which are fighting foot fatigue. Experience has taught them that a salesperson with aching feet is more of a liability than an asset. At Filene's, in Boston, store executives have moved to counter the threat by having a chiropodist make a weekly check of foot complaints among employes. A similar program at the Woodward & Lothrop department store in Washington has shown extraordinary results.

One of the most significant achievements in the field of industrial foot health has been made at the Fulton Bag and Cotton Mills in Atlanta. There a free foot clinic is operated for all workers. Result: a dramatic decline in absenteeism and a surge in productivity.

Chiropodists have learned that, in addition to department stores and factories, foot fatigue is common in the construction and trucking fields. Truck drivers are likely to suffer from a type of callous known as "chauffeur's foot"—resulting from

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prolonged use of the foot on the gas pedal, brake and starter.

One chiropodist sums up: "Thus far, most of us have overlooked the feet as a potential source of trouble. With more attention to the limbs on which we stand industry can experience new gains."

2.2 per cent of homes are vacant

The gap between household formations and housing starts, though larger this year than last, is not alarming. Reasons:



1. Homes vacant and available either for sale or rent total only 2.2 per cent.

2. Between 250,000 and 300,000 nonfarm homes are being demolished, abandoned, or converted to other purposes each year.

3. Many of the older homes are now too small or otherwise inadequate.

These figures are revealed in studies by the Census Bureau and the Bureau of Labor Statistics. The studies make available for the first time this year's comparisons of home building starts and household formations.

Household formations totaled 895,000 for the past year, bringing the total to 47,788,000, of which 42,545,000 are nonfarm households. New home starts are estimated at 1,300,000 for the year.

City explains municipal spending



Oak Park, Ill., a public relations-conscious municipality, tells its citizens and taxpayers how their tax dollars are being spent for municipal services.

Example: When a sewer crew is scheduled to clean a sewer on a particular street, one crew member places a brochure in each mail box of homes fronting on the street, while other crew members set up the equipment.

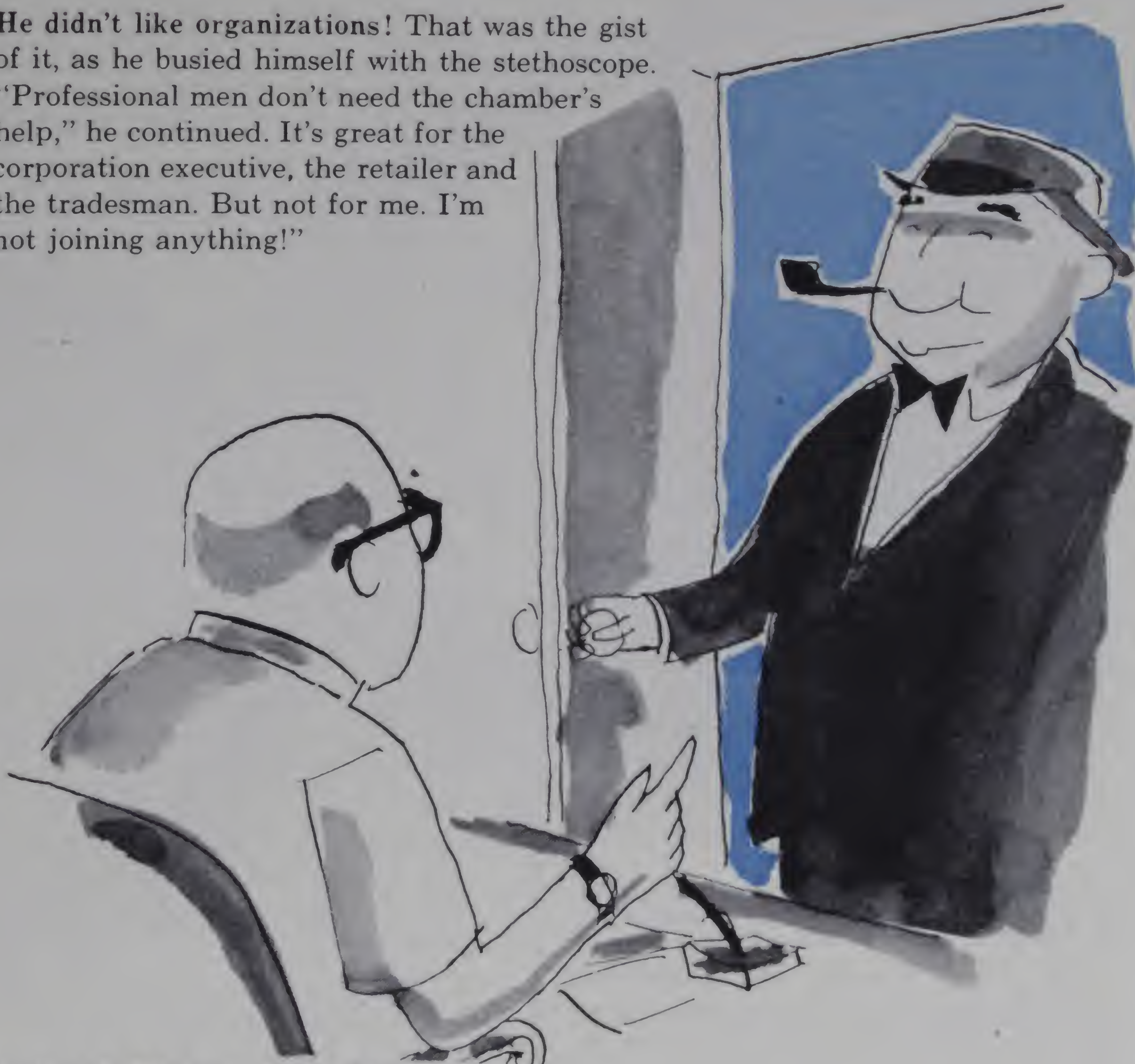
The brochure tells the objectives of the program, how citizens can cooperate, what progress is being made, whom to contact for service, and the source of the money for the work.

Besides sewer projects and forestry operations, Oak Park officials plan to extend use of the brochures to other projects including street markers, parking signs, street repairs and street lighting. Variations also are being prepared for parking violations, refuse collection, water main repairs and some inspection services.

"I'm not joining anything!"

The doctor was cordial when I walked in for my annual check-up. But he wasn't too happy when I surprised him in the middle of my blood pressure test by asking... "Why don't you support your chamber of commerce?" I knew what his answer would be before he told me. . . .

He didn't like organizations! That was the gist of it, as he busied himself with the stethoscope. "Professional men don't need the chamber's help," he continued. It's great for the corporation executive, the retailer and the tradesman. But not for me. I'm not joining anything!"



Look at it this way, I told him as we moved over to the X-ray machine. "It takes a growing city to give a professional man more opportunities. And that's how your chamber works. It attracts new industries, more people . . . and so, in turn, new patients for doctors and dentists, new clients for lawyers and other professional men."

The rest was easy! Especially when I reminded him . . . "Professional men, as taxpayers, benefit from community activities. The chamber is building business, and better business means wider professional opportunities."

It turned out happy all around. I got the big okay on my check-up and walked out feeling like I'd evened the score on services rendered. Guess that's just about the size of it too. Now there isn't a more ardent chamber member in town than Doc . . . and you ought to see the patients pack his office come visiting hours.

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Competition, which is admirable when it drives business to produce better goods at lower prices, can be dangerous when it drives an investigating organization to produce a record.

Any investigation which finds that mergers were a natural result in a growing economy—which some people have known all the time—will look pretty futile, especially if five rival inquiries were making headlines by uncovering abuses.

This need to be spectacular may put a heavy burden on the rival merger investigators because a quick glance at the merger situation suggests that there probably aren't enough abuses to go around.

In the first place, the timing of the investigations is puzzling. True, mergers increased in the early 1950's,

but the total—371—for 1954 was just four per cent above the yearly average for the 36 year period that preceded it. Moreover, over the past eight years, mergers have been fewer than in the two years 1928 and 1929. The years 1930, with 799 mergers, and 1931, with 467, both exceeded 1954, and caused little stir.

The investigators may also face the difficulty of determining whom they are protecting from what. The standard answers are, of course, small business and the consumer.

But the great majority of mergers since 1940 have joined small businesses. A survey for the 1940-47 period shows no mergers between companies with assets of \$100,000,000 or more each and only one involving assets of \$50,000,000. The recent mergers have been efforts of smaller companies to strengthen their competitive positions, diversify their products and ease tax burdens.

As for the benefits competition brings to consumers, logic indicates that mergers may increase, rather than restrict them. If a hypothetical industry has two big firms and two small ones, for instance, a merger which permits the two weaker companies to increase efficiency, lower prices, improve product and broaden markets will certainly mean more competition rather than less. A collateral consideration is that two out of three research workers in America are employed by companies with more than 5,000 employees.

Any perversion of thinking which confuses merger with monopoly may hamper and restrict our free enterprise economy, not only today—but tomorrow.



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ADDING ALLOYING METALS to molten steel changes the composition of the steel and gives it special characteristics. It's chromium, for example, that makes steel stainless. Tungsten, on the other hand, makes steel so

hard that it is used in machine tools to shape 'softer' steel into things to serve you.

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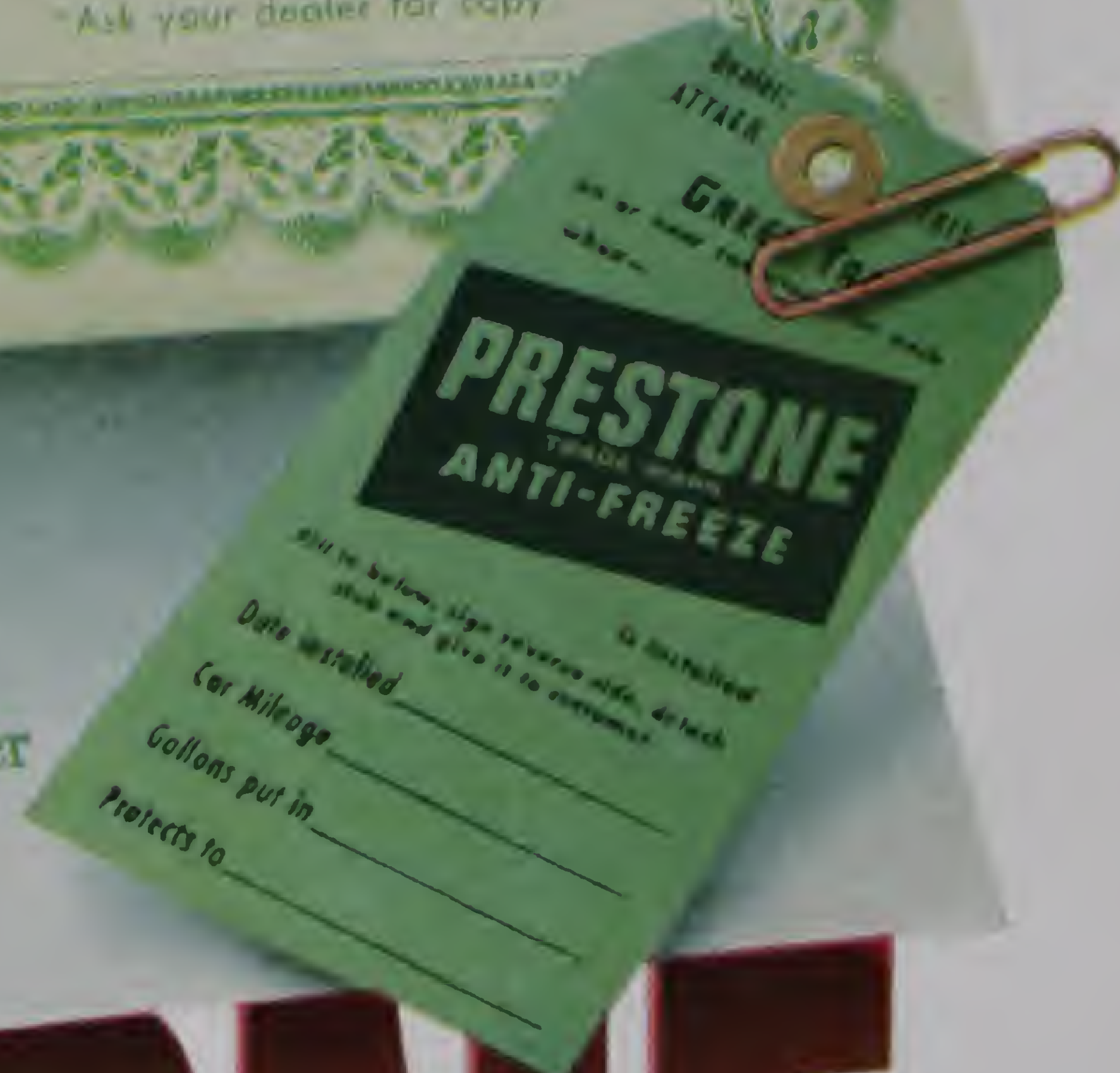
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